

INTERSTATE TRANSPORTATION OF SOLID WASTE

Y 4. C 73/7: S. HRG. 103-190

interstate Transportation of Solid...

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED THIRD CONGRESS

FIRST SESSION

JUNE 3, 1993

Printed for the use of the Committee on Commerce, Science, and Transportation



NOV 26 1999

U.S. GOVERNMENT PRINTING OFFICE

68-958cc

WASHINGTON: 1993



INTERSTATE TRANSPORTATION OF SOLID WASTE

I. C 73/7: S. HRG. 103-190

rstate Transportation of Solid...

HEARING

BEFORE THE

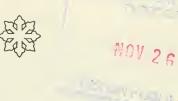
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED THIRD CONGRESS

FIRST SESSION

JUNE 3, 1993

Printed for the use of the Committee on Commerce, Science, and Transportation



U.S. GOVERNMENT PRINTING OFFICE

68-958cc

WASHINGTON: 1993

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ERNEST F. HOLLINGS, South Carolina, Chairman

DANIEL K. INOUYE, Hawaii
WENDELL H. FORD, Kentucky
J. JAMES EXON, Nebraska
JOHN D. ROCKEFELLER IV, West Virginia
JOHN F. KERRY, Massachusetts
JOHN B. BREAUX, Louisiana
RICHARD H. BRYAN, Nevada
CHARLES S. ROBB, Virginia
BYRON L. DORGAN, North Dakota
BOB KRUEGER, Texas

JOHN C. DANFORTH, Missouri BOB PACKWOOD, Oregon LARRY PRESSLER, South Dakota TED STEVENS, Alaska JOHN McCAIN, Arizona CONRAD BURNS, Montana SLADE GORTON, Washington TRENT LOTT, Mississippi JUDD GREGG, New Hampshire

KEVIN G. CURTIN, Chief Counsel and Staff Director JONATHAN CHAMBERS, Republican Staff Director

C O N T E N T S

	Page
Opening statement of Senator Dorgan	1
LIST OF WITNESSES	
Asche, James, Supervisor, White Stone Hill Township	12
Beuchler, Amy, Sawyer, ND	45
Bolinske Boh Bismarck ND	42
Brunsvold, Melissa, Field Staff Director, Clean Water Action, Fargo, ND	36
Coats, Jim. State Representative, Mandan, ND	37
Degele, Bill, Sawyer, ND	42
Degele, Bill, Sawyer, ND	40
Gulleson, Pam, State Representative, Rutland, ND	34
Heitkamp, Hon. Heidi, North Dakota Attorney General	5
Prepared statement	43
Kaylor Brace Granville ND	41
Kaylor, Bruce, Granville, ND	19
Prepared statement	22
Lee, Duane, West Fargo, ND	40
Loorence, Karmet, Sawyer, ND	42
Medlar, Darlene, Dickenson, ND	45
Melroe, Barb, Gwinner, ND	43
Rahrich, Joni, Bismarck, ND	36
Rau, Darlene, Max, ND	27
Redding, Dennis, Mayor, Sawyer, ND	13 38
Reisenweber, Dorie, Britton, SD	39
Prepared statement Riebe, Grover C., Jr., Mayor, Gwinner, ND	10
Ring, Jennifer, State Representative, Grand Forks, ND	33
Scott, Karen, Bismarck, ND	44
Prepared statement	44
Stallman, Rena, Mooreton, ND	41
Stallman, Verne, Mooreton, ND	29
Stuhmiller, Norma, Bismarck, ND	40
APPENDIX	
••• • • • • • • • • • • • • • • • • • •	
Redding, Dennis, Mayor, Sawyer, ND, prepared statement of	88
Asche, James, Supervisor, White Stone Hill Township, Sargent County, ND,	
prepared statement of	96
Bell, Gordon L., Ph.D., Engineering Geologist, Bell Geophysics, prepared	0.0
statement of	93
Chemical Manufacturers Association, prepared statement of	89 82
General Motors, prepared statement of	02
Services, Inc., prepared statement of	47
Gulleson, Pam, Representative, District 26, prepared statement of	74
Help Protect North Dakota Vote Ves on Measure 7 (article)	73
Knudson, Robert L., General Manager, Municipal Services Corp., Echo Moun-	
Knudson, Robert L., General Manager, Municipal Services Corp., Echo Mountain Facility, prepared statement of Koster, Jeanne, South Dakota Peace and Justice Center, prepared statement	80
Koster, Jeanne, South Dakota Peace and Justice Center, prepared statement	
OI	76
Krahling, Conrad, Dakota Rural Action, prepared statement of	95

	Page
Moore, Allen, President, National Solid Wastes Management Association, pre-	
pared statement of	49
Olson, David L., prepared statement of	75
Rau, Darlene, Max, ND, letter from	92
Schafer, Ed, Governor, State of North Dakota, prepared statement of	94
Schwindt, Francis J., Chief, Environmental Health Section, North Dakota	
State Department of Health and Consolidated laboratories, letter from.	
to Senator Dorgan, dated June 17, 1993	76
10 00 march 20 Benn, and a contract 11, 2000 minimum minimum minimum minimum march 200 minimum march 2	

INTERSTATE TRANSPORTATION OF SOLID WASTE

THURSDAY, JUNE 3, 1993

U.S. SENATE, COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION Bismarck, ND.

The committee met, pursuant to notice, at 10 a.m. in the Haugland Room, State Capitol Building, Bismarck, ND, Hon. Byron L. Dorgan, presiding.

Staff members assigned to this hearing: Donald M. Itzkoff, staff counsel; and Gerri Lynn Hall, minority senior professional staff

member.

OPENING STATEMENT OF SENATOR DORGAN

Senator DORGAN. The committee will come to order. Welcome on a beautiful, warm, sunshiny, typical North Dakota June day. It is nice to see all of you here today.

We are here today to discuss an issue that is important, timely, perhaps controversial, but one that North Dakotans are discussing,

and that we are discussing in the U.S. Congress as well.

This is a hearing of the Senate Committee on Commerce, Science, and Transportation. The chairman, Senator Hollings, and ranking member Senator Danforth have approved this hearing. The testimony and discussions of this hearing will become part of the committee's official record.

I thank all of you very much for being here today, and I would like to just give a brief description of the subject matter of this

hearing.

We will begin by hearing testimony from several invited witnesses. First, Attorney General Heitkamp will give some thoughts. We had asked the Governor, but he is unable to be with us. Next to appear are the mayors of a couple of North Dakota communities who are in the middle of discussions about the importation and storage of waste, followed by Mr. Knudson, the facility manager, general manager of the Municipal Services Corp. up at Sawyer.

We also had asked a representative of USA Waste to be present, but they declined the invitation. Then a couple of citizens from Max and Morton will testify, followed by an open mike period, in which I would invite anyone who has anything they would like to

add to feel free to do so at that time.

We do not want to cut out debate. I want this to be a discussion with which you are all comfortable, and I hope to gain from this discussion some additional thoughts and information about how North Dakotans feel about this issue.

There is in this country more and more waste being generated, especially in the largest cities. The question most especially for the

largest cities in this country is where to store this waste.

Increasingly, landfills in the more populous areas and the largest cities are full, and so the question for those folks who are charged with storage is: What do we do with it? Increasingly, they are contracting with companies who then find a place to store this waste.

There are many different categories of waste. There is nuclear waste or spent nuclear fuel. Some say let us take a look at bringing some of that to North Dakota. You know that I have expressed myself publicly on that and said I do not think that is a good idea.

I have had a couple of communities in North Dakota come to us to say, "Mr. Dorgan, I would like you to help us." We are interested in economic development, and developing a toxic waste storage site, or a hazardous waste storage site. I have told them I honestly would not have my heart in helping you try to become a hazardous wastes storage site, because I do not happen to think that would advance our interests. Thus, I have indicated my opposition to that.

But there are gradations of other storage plans of inert waste, of incinerator ash, and nonhazardous waste. They are not all the

same. They are not all alike.

The question of storing these various kinds of waste seems to generate controversy. There are people who feel strongly on all sides, even people who feel strongly that we ought to consider the storage of spent nuclear fuel. There are people who think that is something we probably ought to consider.

So, what I would hope to do is to discuss these gradations of proposals, what kinds of wastes are being proposed to be transported, and what kind of opportunities exist for State and local govern-

ments to make judgments about them.

If we make a judgment that no, this does not make sense, do we have the ability to say no just because we want not to warehouse a certain kind of waste?

At the present time, the interstate commerce clause would prevent North Dakota from prohibiting the importation of waste. The interstate commerce clause would prevent a State from making that judgment.

I am cosponsor of a piece of legislation with respect to municipal waste that would give the States the authority to make their own judgment and say no if they so chose to say no under those cir-

cumstances.

So, those are the kinds of issues that are circling around: issues at the Federal level dealing with changing the interstate commerce clause so that States could make an informed judgment and could decide yes or no; issues at the State level about the environmental areas, and about the advisability of saying yes from an economic development standpoint, or no it does not.

The first testimony will be delivered by Attorney General Heidi Heitkamp. The Governor is unable to be here. However, we would accept written testimony from him as well, and Attorney General Heitkamp has with her staff who are involved and knowledgeable

about more details on this subject.

Following that, we will, as I mentioned, hear from the mayor of Gwinner, and the mayor of Sawyer, following Mr. Knudson, and a

panel of opponents, we will pretty much go to an open mike and have a generally wide discussion on this subject as to how it affects

North Dakota and how you see these issues. So,let me also introduce Greg Rohde on my staff who is with me today, and then let me introduce Attorney General Heitkamp and ask that you would present your statement. We will make your entire statement a part of the permanent record, and you may summarize as you choose. Attorney General Heitkamp, welcome.

STATEMENT OF HON. HEIDI HEITKAMP, NORTH DAKOTA ATTORNEY GENERAL

Ms. HEITKAMP. Thank you, Acting Chairman Dorgan and members of the Senate Committee on Commerce, Science, and Trans-

portation.

My name is Heidi Heitkamp. I am Attorney General for the State of North Dakota, and I want to deeply thank you for this opportunity to appear before this committee and provide testimony regarding the interstate transportation of solid waste and voice specific concerns concerning solid waste management facilities located near Gwinner and Sawyer in North Dakota.

In addition, I will comment on your bill being heard today, S. 439, the Interstate Transportation of Municipal Waste Act of 1993,

as introduced in the first session.

The most frustrating aspects of this debate have been the inability of people to see a way to fashion debate. They simply turn the corner and find another roadblock in the way of self-determination. So, I think it is critically important that we provide forums like this for people to discuss the issues, for decisionmakers to have access to varying points of view and try to resolve what really is a

national debate and not just a debate in North Dakota.

In a democracy the persons affected by laws and governmental actions should have some say in the decisions that affect their destiny. Activities of megalithic waste companies under the guise of the commerce clause of the Constitution have severely limited the ability of citizens of rural States to adequately protect themselves and their environment. I think the bill that you have before you gives both individuals and communities an opportunity to present their points of view and to determine their own destiny.

Less populous States like North Dakota have been struggling to protect their citizens' health and their environment from the dumping of solid and industrial waste generated in other States which

have adequate facilities for disposal of these wastes.

One of the reasons people choose to live in a State like North Dakota is because of the exceptional quality of life the State offers. This includes our great pride in this State's environment, and in the fact that it is both clean and safe.

The long-term social and economic future of this State is jeopardized when our ability to control the quality of our health and envi-

ronment is compromised.

The recent hearings conducted by the North Dakota State Department of Health and Consolidated Laboratories regarding a proposed ash disposal facility near Sawyer, a proposed municipal and industrial waste disposal expansion near Gwinner, and a proposed medical waste incinerator in Bismarck, were all fraught with the same theme—an extreme frustration expressed by citizens because of their inability to have meaningful input into permit decisions which affect both their health and their environment and, I might

add, their sense of North Dakota's future.

In each of these instances, the health department was restricted by law to consider only that information regarding direct impact on either health or the environment. The department was unable to weigh such factors as the public interest and the overwhelming disapproval of local citizens regarding the proposed permit.

A large majority of residents indicated that in a democratic form

A large majority of residents indicated that in a democratic form of government they had somehow amazingly presumed that they would have input into the decisions which affect their destiny. Ap-

parently, this presumption was wrong.

The public has meaningful input on nearly every aspect affecting their livelihood from taxation to criminal penalties through the election process. They did not have that input here, and what is truly unique about not having that input here is these are decisions that the public fundamentally sees as safety and health decisions, and really, what is the future of the State of North Dakota? What could we anticipate that future is going to be?

It is amazing to me that they can have all this input on a tax question and so little input on a decision that will fundamentally

affect their quality of life and their personal security.

We are, obviously, as lawyers, aware of the limitations the Supreme Court has placed on the ability of the State to control within its borders disposal of waste generated beyond its borders, and I reference here the *Fort Gratiot* case which Senator Dorgan has

mentioned earlier.

If you look at the laws that were passed by the North Dakota Legislature, I think they represent a seasoned and a reasonable approach to the constitutional limitations. I think that is very important that we note that, in the days when we see more and more corporations willing to pursue litigation in the area of 1983 actions with the potential of 1988 attorneys' fees, that you have to be very, very careful when you approach decisions which arguably touch upon a commerce clause violation.

As the citizens look at their opportunities, they have to weigh their willingness to take a step against the risk of incurring thousands and potentially millions of dollars in attorneys fees and dam-

ages under 1983.

For the people in the audience who are not familiar with that, 1983 is a section of the United States Code which was adopted in the days of the Ku Klux Klan to allow citizens to have a civil avenue of redress against people who affected their civil liberties.

The courts in this country have expanded this to give corporations the right to sue under 1983 in the event of commerce clause violations. I personally think it is an expansion that is unwarranted by the statute, but it does create another encumbrance in making those decisions and the ability and the flexibility to make those decisions. So, not only can you be in a situation where you have to unwillingly accept the waste, but you have to pay for the litigation—both sides of the litigation—to try and stop it, and there is something that the public believes is wrong about that in America.

I want to conclude my comments by relaying my sense of personal history in North Dakota. I think, since the days of statehood, people in the State of North Dakota have experienced a great deal of frustration about the issues of self-determination. I mean realistically, the Nonpartisan League was nothing more than an attempt to take back control away from the large grain companies, away from the large railroads, away from the Minneapolis bankers. We are today in a situation where the people of the State of North Dakota in general are asking to have some control over this deci-

Now, there are those among us here today who may say, we do not want this bill to pass. We think that this is misguided. It will upset this notion of how we should dispose of solid waste in this country. All this bill does is simply give the people an opportunity through their Governor to say no. If in fact this is a meaningful project, if in fact this is meaningful economic development and the public analyzes it that way, surely the answer will be yes. It is simply a matter of giving this decisionmaking power back to the people of the State of North Dakota, and that is why I am here in support of this bill.

I want to tell you, appearing with me here today is Neil Knatterud, who is the director of waste management for the health department, and Steve Tillotson, assistant director of the division of waste management. They have attended a number of meetings throughout the State of North Dakota. I do not think they are here to offer an opinion about your bill. I do not think they are probably authorized to offer an opinion, but I did want them to provide some technical information for you.

To my right here is Bill Delmore, who has been an attorney initially with the health department and now with the attorney general's office for a number of years. He has, in fact, personally attended a number of hearings that I reference in my testimony and I think can give you also a sense of the frustration that he has dealing with the input from the people and the inability of the laws

of this country to be responsive to that input.

[The prepared statement of Ms. Heitkamp follows:]

Prepared Statement of Attorney General Heidi Heitkamp

I am Heidi Heitkamp, Attorney General for the State of North Dakota. Thank you for the opportunity to appear before your committee and provide testimony regarding interstate transportation of solid waste and voice specific concerns regarding solid waste management facilities located near Gwinner and Sawyer, North Dakota. In addition, I will comment on S. 439, the "Interstate Transportation of Municipal Waste Act of 1993", as introduced during the first session of the One Hundred and Third Congress.

In a democracy, the persons affected by laws and governmental actions should have some say in the decisions that affect their destinies. Activities of megalithic waste companies under guise of the Commerce Clause of the Constitution have se-

waste companies under guise of the commerce clause of the constitution have severely limited the ability of citizens of rural states to adequately protect themselves and their environment. S. 439 gives both individuals and communities a means to preserve their quality of life.

Less populous states like North Dakota have been struggling to protect their citizens' health and their environment from megadumping of solid and industrial wastes generated in other states which have adequate facilities for disposal of these wastes. One of the masons people choose to live in this state is because of the event. wastes. One of the reasons people choose to live in this state is because of the exceptional quality of life this state offers, including an environment that is both clean and safe. The long term social and economic future of this state is jeopardized when our ability to control the quality of our health and environment is compromised.

Recent hearings conducted by the North Dakota State Department of Health and Consolidated Laboratories regarding a proposed ash disposal facility near Sawyer, a proposed municipal and industrial waste disposal expansion near Gwinner, and a proposed medical waste incinerator in Bismarck were all fraught with the same theme—an extreme frustration expressed by citizens because of their inability to have any meaningful input on permit decisions which affect both their health and their environment. In each of these instances, the Health Department was restricted by law to consider only information regarding direct impact on either health or the environment. The Department was unable to weigh such factors as the public interest or the overwhelming disapproval of local citizens regarding the proposed permits. A large majority of residents indicated that in a democratic forum of government they had presumed that they would have some input into decisions which affect their destiny. Apparently, this presumption was wrong.

The public has meaningful input on nearly every aspect affecting their livelihood

from taxation to criminal penalties through the election process, legislative process, initiative, and referendum. Why, then, is there no means for citizens, either through their own power or through their elected officials, to have meaningful input on decisions regarding siting and disposal of solid and industrial waste disposal facilities?

We are aware of the limitations the Supreme Court has placed on the ability of a state to control, within its borders, disposal of waste generated from beyond its borders. Perhaps the Court was clearest in Fort Gratiot Landfill v. Michigan Dept. of Natural Resources, 119 L. Ed.2d 139 (1992), when it held that a state may not hinder interstate commerce unless the state can show that the regulation furthers health and safety concerns which cannot be addressed through non-discriminatory means. North Dakota has made a sincere effort to protect its environment through law and regulation within the framework of the Supreme Court's interpretation of

the Commerce Clause.

We are also aware of the growing movement to define solid and industrial wastes differently from unique hazardous wastes under Commerce Clause interpretation. There are certain wastes which are so rare or unique in their nature that it may be feasible to treat or dispose of them in only one or two places in the nation. However, every state has the capacity to adequately site and control disposal of solid and industrial waste. There is no reason why these wastes need be afforded special protection from control through democratic processes. Providing the general public with some means of control over disposal of these wastes such as that referenced in S. 439 appears to be an efficacious method of both protecting health and the environment while at the same time allowing a forum in which the public interest will be served.

The governor, the chief elected official within a state, is in an excellent position to weigh economic, environmental, and domestic concerns. The governor is elected with input from both environmental and business concerns and has a feeling for the general opinion of citizens regarding mega-disposal of waste. Since all states have capacity for disposal of these wastes, a decision by an individual governor, pro or

con, will have minimal effect on overall commerce and the business climate.

North Dakota relies heavily on its generator inspection program to protect its environment from the improper disposal of solid or industrial waste. It is impossible for our state to adequately inspect the generator sites providing waste to a megadump located in North Dakota. If we require the states where the waste is being generated to have a generator inspection program comparable to that in North Dakota, we are in danger of being in conflict with the Commerce Clause. in essence, we are prevented from providing the same protection regarding out-of-state wastes that we provide for wastes generated within our state. It is clear that the improper disposal of these types of wastes could result in irreversible damage to our state's surface and ground water resources. Since we have limited actual field data on new technical safeguards such as liners and leachate collection systems, we cannot be sure that even the proper disposal of such wastes on a megalithic scale will not result in irreversible damage to surface and ground water resources.

Another positive aspect of S. 439 is that it places more of a burden on states where waste is generated to develop means of handling that waste. The ultimate

goal of federal environmental laws to protect our environment will not be reached until states, counties, and cities develop comprehensive recycling operations, reduce waste generation, and develop methods for treatment of solid and industrial waste. Allowing a state to have its waste indiscriminately hauled to less populous states for mega-disposal removes the burden of planning for, handling, treatment, and disposal of waste. In effect, this taciturn approval of indiscriminate dumping defeats the purpose of federal waste management and water pollution control statutes.

Senator DORGAN. Well, thank you very much. If the Congress were to enact some kind of legislation which would empower the States to make their own decision about this and affirmatively or negatively decide that they want to embrace certain activities, should that decision relate only to municipal waste, as the bill we are discussing today does, or should it be broader? Also, should the decision, if we were to enact legislation that would override the interstate commerce clause on this matter, should that decision be with the Governor, as the legislation places it, or should there be a broader mandate here?

Ms. HEITKAMP. As to the first question, I believe it should be broader as to the types of waste. In fact, one would make an even more persuasive argument than I have made today on issues of hazardous waste not generated within the borders of the State of

North Dakota.

I think many of the citizens of North Dakota may tell you one of the frustrating things is that they would be willing to provide for storage if they also were the willing recipients of the economic

activity that generated that.

Now, we can all say we live in a market society where we as consumers assist in the generation of that waste. That is definitely true, but I doubt if North Dakota as a market State has, for instance, assisted in the generation of all of the waste for General Motors Co. I think that is a reach, and I think people should have an opportunity to have input on issues that involve other forms of waste.

It gets into a little more sensitive area when the question comes up, who is going to take any of this? At that point I think it is incumbent on Congress to look at the avenues that it has available

to respond to that concern.

If in fact these projects are meaningful and are safe, and they convince the public of that, obviously there will be a siting oppor-

tunity.

On the second question about the interstate commerce clause and the role of the Governor, I think that that is a judgment call that the sponsors of this bill have made—to put it in the hands of the Governor. Some here would say maybe that belongs in the county. Some people would say maybe it belongs in the township to make those decisions.

To me, the sense of putting the decision with the Governor is appropriate in that in many ways the siting of waste in North Dakota is a statewide problem, and it cuts across jurisdictional boundaries, and not only in terms of the health and the potential effect to aquifers and to clean air and clean water, but also in terms of self-esteem, the kind of personal self-esteem that we enjoy in North Dakota and the direction overall that we want to take in terms of planning for our future.

Senator DORGAN. When I grew up in Regent, ND, we did not have a landfill, we just had a dump ground, and whatever waste we had was simply hauled to the dump ground and laid on top of the ground. All of the town's waste was disposed here with one exception: the service stations in town that had used oil would, as a benefit to the community, pour the oil on Main Street to keep the

dust down.

Now, for a half dozen reasons, in the description I have just made about the way we operated in my home town, there would be a lot of officials on their way to vacation without much pay in some minimum security facility if that were done today. You cannot pour oil on your streets to keep dust down. That is something we have learned does not make much sense. You cannot haul garbage out and lay it out on the ground in a dump ground. You have to have a different approach in dealing with waste.

So, we have learned a lot, and we have come a long way, and we have created regulations, some of which are uncomfortable for people to deal with, but I would like to ask the question of Mr. Delmore: Do the States have the effective capability to make distinctions and to adequately evaluate the difference in gradations of

waste?

Some would say this kind of waste is simply an inert waste that is put in a cell some place that is no different from harmless waste that has been stored forever without consequence. On the other hand, this proposal is for waste that is classified nonhazardous but has some potential risk to it, this waste is clearly hazardous waste which must be stored with enormous care.

Do we have the capability among the States to be evaluating this

and studying the full consequences?

Mr. DELMORE. If I might, Acting Chairman Dorgan, we have legislation in North Dakota to classify waste by type and quantity, but

in fact it is very difficult to put in place.

We have a very strong generator inspection program in the State. Two sessions ago, we wanted to require other States bringing waste here to have the same type generation program, but we felt we could not even put the words, "comparable to North Dakota's" in the law because that may violate the commerce clause, so we had to use "effective waste generation program."

So, even though we can classify waste here by type and by quantity, we cannot inspect generating sites in other States to ensure

that that is the type of waste that is coming. We are limited.

Ms. HEITKAMP. I think, if I can just offer an observation, most of the Federal environmental protection programs are really a model of federalism, and most of the enforcement that is occurring, especially in the area of waste, is State-based enforcement. It is not EPA, it is not Department of Justice-based enforcement.

The States are given the lion's share of responsibility for enforcing the Federal restrictions. To now say they cannot be trusted to make those decisions in my opinion is totally contrary to the whole scheme that Congress has enacted for environmental protection for

the last 20 years. That dog does not hunt, quite frankly.
Senator DORGAN. I assume, as I indicated in my opening statement, that the reason this issue is bubbling up and will continue, in my judgment, to bubble up at even an enhanced pace, is because most of the major landfills are full, the major concentrations of population are desperately trying to find ways to deal with their problem of storage of waste, and when you look at those opportunities, one of the ways to do that would be to move it somewhere where there is less concentration.

Now, I also assume that we export some waste. We are not large generators, because we do not have a lot of people. We have 640,000 people living on 70,000 square miles. Per capita, we gen-

erate waste probably at the national average, maybe more.

I assume even though we do export some waste, and I am interested to know how much, the central issue here is the large concentrations of population very much are looking for places sparsely populated to store it. Is that a fair characterization?

Ms. Heitkamp. Before I turn over the mike, I want to just make one comment. You said in your comments that you assume the reason why this is happening is because there is not capacity in other areas. I think if you look beyond some of the issues here you will find out there is capacity. It is a matter of cost-benefit analysis. Where can you do it cheaper? Where can you provide this service where the cost per ton is lower?

Even though there may be capacity, there may be sites available within the general area of generation; it is more expensive to dispose in those sites than it is someplace else. So, it is important that we not say, this is simply a problem of overflow of capacity in certain areas. It is also a problem and a concern of economics.

Senator DORGAN. That is a good point. I appreciate that.

A VOICE FROM THE AUDIENCE. I think another, in addition to that probably it is the siting difficulties that they have in a more populated area.

Ms. HEITKAMP. Mr. Chairman, if I could just offer one other com-

I think that it is important that we focus on what the goal is in this country, and that is to limit the generation that we have of municipal waste, and how we can do that and adequately dispose

of what we must generate.

When you look at the laws to protect the environment, I do not think those goals are really going to be reached until the cities develop comprehensive recycling programs, reduce waste generation, and develop methods for treatment of solid and industrial waste. Allowing a State to have its waste indiscriminately hauled to less populous States for megadisposal removes the burden for planning for the future.

Senator DORGAN. Greg just gave me some information that I had not previously seen on the increase in tipping fees at the landfills. The increases are up more than 30 percent in an annual survey, some of them up over 100 percent, so I think that buttresses what you just said. Because of the substantially increased cost of storage in certain areas, they look to other areas to minimize their costs. It is an excellent point.

Well, I appreciate very much the full statement you have given us, and I would like to be able to come back to you for additional information as the year moves on on this issue, and I thank you

very much for testifying.

Ms. HEITKAMP. Šenator, thank you again. I have to attend a news conference on Special Olympics, and I hope to be returning

to listen to the rest of your panel.
Senator DORGAN. Next, we will hear from Grover Riebe, the mayor of Gwinner, ND, and Dennis Redding, the mayor of Sawyer, ND, both of whom are local officials who are responding to an issue in their local areas of the storage of municipal waste as well as industrial waste.

While you are coming up, let me also introduce Don Itzkoff of the majority staff and Gerri Hall of the minority staff on the Senate Commerce Committee, also working on these issues. We very much appreciate their being here.

Mr. Redding, thank you very much for being here, and Mr.

Riebe—am I pronouncing that correctly?

Mr. RIEBE. Riebe is correct.

Senator DORGAN. And who is accompanying you?

Mr. RIEBE. Jim Asche, with the White Stone Hill Township Board.

Senator DORGAN. Jim, thank you for being with us.

Both of you are local officials who have been required to respond to proposals about waste being stored in your area. Mr. Riebe, why do we not hear from you, and then Mr. Redding.

STATEMENT OF GROVER C. RIEBE, JR., MAYOR, GWINNER, ND

Mr. RIEBE. Thank you, Senator Dorgan.

My name is Grover Riebe. I am mayor of Gwinner, ND. I appreciate the invitation to present the concerns of the residents of the Gwinner community on interstate transportation of solid wastes.

I would like to point out, however, that the city of Gwinner is not the controlling agency with respect to this landfill, and White Stone Hill Township Board has been involved with the operational problems here for years, and in that regard I have brought Mr. James Asche, a member of the White Stone Hill Township Board, along with me and I am asking that he be allowed to present testimony as well.

Senator DORGAN. Without objection.

Mr. RIEBE. On April 19, 1993, a public hearing was held in Gwinner. Officials from North Dakota State Health Department, North Dakota Geological Survey, USA Waste, Moore Engineering, and White Stone Hill Township discussed the current and future landfill operating plans.

A recap of operating violations, both past and present, was presented by the North Dakota State Health Department, and health department officials also discussed drum violations involving some

2,300 to 2,400 drums at the site presently.

Since this April 19 meeting, not one day has passed wherein we have had half a dozen people stopping at the city offices, have also

visited city council meetings with questions and concerns.

Among the concerns are: Does the landfill have to accept out-of-State waste? What will happen with the drums currently in violation? With the history of violations, how can a landfill be grandfathered into zoning regulations and allowed to become a perpetual growth industry? Is the city properly zoned? How about the township, are they properly zoned, and the county as well? What good is a consent agreement—this is an agreement between the operating facility and the Health Department—if violations are allowed to continue? What happens to local waste should the landfill close? Why is the cost of disposal so high? What is industrial waste? Can it be hazardous?

The term, "industrial waste," is probably most confusing to people. Obviously, it is not household waste, therefore it must be hazardous. Industrial waste is defined as a waste generated by an in-

dustrial manufacturing process, and by definition must not be hazardous.

Congress has passed a number of laws to protect and improve the environment. These laws are the solid waste regulations, Resource Conservation and Recovery Act, known as RCRA, SARA Title III. Clean Water Act, Storm Water Act, and the Clean Air Act as well.

Disposal of waste are governed by the Solid Waste laws and RCRA, while SARA Title III covers extremely hazardous substances otherwise used or manufactured. It is really the release

My point here is to indicate to you that there is not sufficient distinction in the technical characteristics of hazardous waste versus industrial waste. Certain wastes which are very close to hazardous toxicity levels can be transported to and disposed of in municipal

waste landfills.

Furthermore, industrial waste does not require the same level of testing and characterization on the part of both the generator and disposal facility as hazardous wastes require, and is absolutely required on wastes that are hazardous. The result is that wastes which are very near hazardous levels are accepted at municipal landfills.

Looking at SARA Title III, this law places restrictions on and requires reporting of the use of approximately 604 extremely hazardous substances. In general, this affects only large businesses.

The disappointment here is that a person can find products containing these same extremely hazardous substances in any retail store. Once the containers are empty, off they go to the landfill, introducing more hazardous materials.

Why not give consumers a chance to make an informed decision? Why cannot product labels state very clearly that a substance is

formulated using an extremely hazardous substance?

This State and Nation, for that matter, would be far better off if more emphasis were placed on the development of nonhazardous substitutions.

Cities and towns throughout North Dakota have been examining recycling programs. Many towns have found recycling uneconomical. It appears that the bottom has completely fallen out of the market for recyclables. Other towns have implemented programs in the hope of at least breaking even.

To date, there is not enough focus on recycling to minimize or even eliminate waste. More emphasis in the area of recycling could potentially eliminate the need for interstate transportation of solid waste. Why not develop improved technologies to convert solid waste to energy? This could reduce volumes as much as 90 percent.

In closing, two puzzling questions remain. First, how can it be economically feasible for large cities to ship wastes many hundreds of miles for disposal in North Dakota at costs lower than the cost

of disposal at their own local facilities?

Second, why do we fight the solid waste issue after the waste has been generated rather than find solutions beforehand, find nonhazardous substitute materials? Prevent the waste.

Senator DORGAN. All right, Mr. Riebe, thank you very much.

We will call on Mr. Asche. I want Mr. Redding to know you will have equal time. I did not know they were bringing two—we are happy to have both of you, and I will be happy to give you the same amount of time, Mr. Redding.

Mr. Asche, why do you not proceed?

STATEMENT OF JAMES ASCHE, SUPERVISOR, WHITE STONE HILL TOWNSHIP

Mr. ASCHE. First let me begin by saying I welcome the opportunity to address this panel. I appreciate what you are doing, Senator Dorgan. I think this is a very necessary issue that we need to look at, and before I get started I want to point out that I have beside me petitions which have been circulated mostly in the southeastern corner of the State—however, there have been other locations within the State—petitions stating opposition to the construction of an expanded landfill in the Gwinner area.

These petitions contain signatures of 5,132 North Dakota residents who were gathered in the timespan of 2½ weeks. This is intended to indicate the feelings toward opposition that we have in

our State.

Upon reviewing the draft of S. 439, the Interstate Transportation of Municipal Waste Act of 1993, I have concluded that the following concerns need your attention. In subsection (b)(1), Exceptions to Authority to Prohibit Out of State Waste, it appears that if an individual landfill already in operation and in compliance with State laws received any municipal waste in 1991, it could be allowed an unlimited increase to its intake rate of out-of-State waste. Is this not contrary to the intent of the bill?

The draft also indicates no provision for enforcement. Clear responsibility for enforcement needs to be established, and consequences for violations must exceed what could be considered the

cost of doing business.

This bill is definitely a step in the right direction. The United States needs this bill. North Dakota needs this bill. The more densely populated States should not be allowed to transfer their waste disposal problems by easy, fast, and cheap dumping in the soil of the less populated States, threatening the health and environment of people who live far from where the waste was generated.

The American lifestyle promotes consumption and disposal. The environment and quality of life is subjected to irreparable damage.

The children will inherit the wastelands being created today.

This bill can encourage more responsible solutions to waste disposal problems—for example, increased recycling. Instead of simply paying a fee and shipping the problem out of State and out of mind, an incentive to look more creatively at waste disposal appears.

According to the Ramsey County Division of Solid Waste, St. Paul, MN, the disposal fee at the Ramsey County facility is \$67 per ton, and \$98 per ton at the nearby Hennepin County incinerator. This compares to a proposed \$49 per ton for the planned "trash train" which would ship waste from a St. Paul transfer station to a landfill in North Dakota by rail. Easy, fast, and cheap—problems not solved, just transported across the border.

Municipal waste or incinerator ash destined for a landfill is not a commodity of commerce. Nobody wants it. It is not converted to energy, except methane during decomposition. It is not used as raw material for any salable product. Again, nobody wants it. Instead, landfill operators are paid to bury it.

In behalf of the residents of White Stone Hill Township, I must say, for several years we have observed the daily movement of large garbage trucks through our community. They deposit their

load on the growing mountain of waste and are gone.

We are peace-loving people who have learned to tolerate this traffic, but have yet to accept it. It is difficult to imagine the assault on our dignity and our environment, including regional groundwater supplies, should the rate of incoming waste be al-

lowed to grow unchecked.

According to the 1992 North Dakota District 5 Solid Waste Management Report, the Dakota landfill near Gwinner is already receiving 80 percent of its current, 250-ton-per-day volume from out of State. The Grand Forks Herald recently reported that the current owner plans to increase the intake rate to 2,000 tons per day, mostly from out of State.

Senator Dorgan, White Stone Hill Township needs this bill.

Thank you.

Senator DORGAN. Mr. Redding.

STATEMENT OF DENNIS REDDING, MAYOR, SAWYER, ND

Mr. REDDING. In April of this year I started my 14th year as the mayor of Sawyer. That is quite a long term as far as I am concerned, but after 8 years in that position I felt it was time for someone else to take over the position, so I did not run for reelec-

tion, but was reelected as a write-in.

After 12 years, I again felt it was time for another change, and I told the council that, and about 5 months before election I said, "I am done at the end of this term." I was reelected again, and I have not been reelected as a write-in for any time when there was no opponent. There has always been a name on the ballot except one time, but the last time there was a man who had his name on the ballot, and I still was reelected as a write-in.

Senator DORGAN. I am willing to accept that you must be mighty

popular, if you win write-in campaigns.

Mr. REDDING. At times.

Senator DORGAN. That is very interesting. Thank you.

Mr. REDDING. In my 13 years as mayor—well, in April it started the 14th year, so it is 13 complete years—I have seen quite a few changes in Sawyer. Some of them have been fairly controversial.

The landfill south of town is a little controversial, but I want to tell you, it was not as controversial among the city people as a project that we completed about 5 or 6 years ago, and that was paving the streets. That created a lot of controversy, and a lot of controversy in my family, but now that the streets are paved, and people are enjoying them, that controversy is passed.

We have relined our sewer lagoon, we have laid a slab of cement for a tennis court and basketball court, we have an annual July 4 celebration—I would like you to come to that some year. You could take my spot and lead the parade, then I could watch one time.

When Mr. Shannonhouse, Brian Beeter, and I met for the first time, that was over 4 years ago to talk over MSC's proposal, I was fairly impressed. Like you said in your home community, when you were growing up there, they had a place for a garbage dump. Mr. Shannonhouse brought a proposal that was nowheres close to that. It was a high-technology proposal, like none that I have ever seen before.

He had public meetings where everyone was welcomed, and the city hall was full, and questions were asked, comments were given. He took those questions and comments back with him to his headquarters, to his people, talked them over, talked them over with the health department, and came up with an even better design for the landfill that they had proposed for south of Sawyer.

That landfill design that they have now, there is none equal to it anywhere in the Nation as far as industrial waste, and in fact that landfill exceeds most hazardous standards, and I believe it also exceeds all of them, but I am going to be careful and say that

it exceeds most.

Originally, Mr. Shannonhouse stated that there would probably be between 6 and 10 full-time, year-round employees. That has increased. There are 25-at least 25 now that are full-time, yearround, plus today I think there are 10 full-time temporary positions for construction.

That is quite an economic boon to any community. Fargo, I am not sure of the population of Fargo, but I think that they would more than welcome a business to come in with that kind of opportunities, and we are talking now—the Governor is not here today. He is gone at a meeting talking about—hoping to keep Grand Forks Air Force Base open. There is a possibility of lost jobs. We have these here now, and I would hate to lose that, and if this bill goes through, that is a good possibility, a very good possibility.

I have heard testimony today that it is cheaper to transport waste to North Dakota, and that is a fallacy. If you are transporting waste from any State, any distance, it is going to cost you

money in transportation costs.

I just came back from a tour, from a trip to Michigan, and touring some of the General Motors plants, and I found out that transporting waste from Michigan to here, and it is buried in different plants as to how much the rate increased, but there were sometimes 5 to 10 times difference, and higher increase in the rate that their waste is costing to ship to North Dakota.

Now, for General Motors to ship their waste to Sawyer, there is a reason, and that is safety in the long run. It is costing them more money now, but 20 years from now it is going to be there, and they are not going to have to worry about spending millions to redo it.

My proposal, I do not think this legislation is necessary. What I feel would be necessary is high standards for all facilities in the country, nationwide. Come up to a standard that is going to get out the lowlife, so to speak, and keep the concerned, high-level companies in business.

Set the standard so high that they have to operate with integrity, and if they do not, close them down. That is pretty simple, but I do not think that a Governor, a mayor—I do not have that authority. Never have had, and never will have, but I do not think that

a Governor should have that authority.

I think that authority should only come from the health department, which it does now. They have a trained staff, they have the expertise, they work on it day after day. Let them handle it. If they think that there is a company that is not coming up to those standards, they have time lines where they can issue or deny a permit. If they do not think they are meeting those standards, close it.

At the same time, part of MSC's agreement with the health department and part of their permit requires that they have cash on hand that is put away that they cannot touch. The health department can, and Mr. Knudson can probably verify how much is on hand for cleanup, if necessary. Make that a requirement for every

company.

Mayor Riebe was talking about the waste that was going unchecked. We have at Echo Mountain in Sawyer an onsite inspector that is an employee of the health department. He is onsite every day. That should eliminate that problem. You have someone there

that is looking over your shoulder, basically, every day.

The solid waste industry is growing every day and is never going to go away. I have heard today twice talk about recycling, and I think that is very good. I agree with recycling to a point. You and I are never going to recycle everything we use, never, and last October, that was brought home real clear to me by a person who calls herself a so-called environmentalist. I got a call at 2:30 in the morning to go to a fire at her home. Their garbage can fire had gotten away from them. They weren't recycling, yet they call themselves environmentalists.

We cannot stop that. We have to set standards at disposing waste, and make those standards high. That is the only way that we are going to take care of the problem, and basically get the politics out, get the people there who know what they are doing, such

as the health department.

Steve Tillotson, Mr. Knatterud, they have the expertise to take

care of this problem. I do not, and I never will have.

Senator DORGAN. Mr. Redding, thank you very much. It is interesting that you both come from similar backgrounds, mayors of small communities, township officers, and yet reach different conclusions about what I think are the risks you are discussing and the opportunities you are discussing with respect to the storage of waste.

Let me ask a number of questions, if I may. First of all—I will ask the next witness from MSC this, but could you just characterize for us what kind of waste is currently being shipped to that

site? That is municipal waste.

Mr. KNUDSON. It is industrial waste that comes from General Motors plants. The majority of it is mud from their wastewater treatment plants. They take the water that they use in the processing, and filter it, get the dirt and other debris out, filter it, press it, and squeeze it to get everything out of it that they can because they do not want to pay for hauling water, and then send that to North Dakota.

Senator DORGAN. You are fairly well convinced, based on what you are saying, that with that kind of waste, that it does not pose

risks. The kind of storage mechanisms that have been developed. the science in that storage approach that has been developed does not pose risks, and you indicate that this is a growth industry, the storage of waste is a growth industry. I agree with that. I think most of us understand it is.

With your perspective on it that it is not something that poses risk, is there a limit to how much of this growth industry one would want in your region, or in the State, or is it unlimited in your judgment?

Mr. KNUDSON. That can go both ways. I would not propose having any kind of a facility like we have in downtown Bismarck. I would not propose having that right next to Lake Sakakawea. That is where the health department comes in—site design and site location is very important.

Where we are at, in my opinion, could not be any better. The land-you were there about 3 years ago, and I would like to have you come back again and see the vast changes that have been

made in that time.

I want to stop here. When I say "we," I am an employee of MSC, and I am proud of it-very proud. I have never worked for a company that spends so much time and effort making sure that things are done right.

Senator DORGAN. Would you quit if you felt that things were being done that compromised the issue of risk for your community?

Mr. KNUDSON. Yes.

Senator DORGAN. Let me ask Mr. Riebe and Mr. Asche, Mr. Redding says that with respect to the storage of industrial waste—that is, an inert form of waste—they have an inspector there daily. Is it not something that one is capable of controlling if you have an inspector at the site daily to understand what you are depositing in a manner that would not pose a risk for your constituents?

In other words, if he is comforted by the fact that there is an inspector inspecting what is deposited, why do you experience fear at

the prospect of storage of the same kind of waste?

Mr. ASCHE. Let me respond first. My point was this.

There are in terms of measuring toxicities about 40 different characteristics that are measured in a lab in order to determine

whether it is industrial or whether it is hazardous.

The point I was attempting to make was—and let me take an example of a heavy metal, lead, or chrome. Above a level of 5 parts per million causes that waste to be hazardous. Below 5 parts per million—all it has got to be is 4.99—now it is industrial.

If it is hazardous, it has the requirement on the part of the generator to be characterized, it has the requirement on the part of the

disposal facility to be characterized and verified from the lab.

There is also a very tight manifesting requirement for the transport. There is no such requirement on the part of industrial waste. There is no measurement of it once it has been determined as not hazardous, and an inspector at a landfill will never find it.

Senator Dorgan. So, you are saying there are categories and you draw a line saying if you are over this line you are considered haz-

ardous and classified as such.

Mr. ASCHE. That is Federal law.

Senator DORGAN. But if you are under the line, and just under the line, you still could have content that poses some risk but it is technically classified as nonhazardous.

Mr. ASCHE. That is correct.

Senator DORGAN. Would that be generally true in typical industrial waste that is shipped?

Mr. ASCHE. I cannot answer that, Senator.

Senator DORGAN. Mr. Redding, how do you respond to that point, that even though it might be classified as nonhazardous, you would still be depositing materials with that waste that, while falling below the line of the nonhazardous classification, still could pose some risk?

Mr. REDDING. They—well, I agree with him that, you know, you have that line and above that would be hazardous and below that is nonhazardous. At our facility, every load that comes in—and he says that an inspector would not find that. Every load that comes into our facility is sampled. You know what is there. If it is above that line, the generator is called, told what the problem is, and it is sent back, or sent to one of the hazardous waste sites in Oklahoma or Utah.

Senator DORGAN. Mr. Riebe and Mr. Asche, are you simply saying that you need more information with which to make a judgment about this question, or are you coming here saying that based on what you know, you do not want this to happen in your area?

What are you saying at this point, and what are people in your region saying? Is this the fear of the unknown, or is it something

where they generally know and do not want it?

Mr. ASCHE. Senator Dorgan, at the Dakota landfill near Gwinner we do have a site monitor on the premises. This is one person, actually an employee of the township, and that person's job is to

monitor the waste that is being deposited.

As I said earlier, the present waste rate is approximately 250 tons per day. This is municipal solid waste being brought in at a very steady rate. We feel that it is beyond the realm of reality to expect one person to go through 250 tons of waste a day, municipal solid waste, make visual inspection, and then have it covered.

This landfill, as you could find in the health department records, has had some problems, they have had some violations. Our confidence level is very low. We feel that we do not want to take this risk. There is too much at stake. There is too much damage, potential damage to our environment, and once it is done, how do you ever come back? That is our viewpoint at this time.

Senator DORGAN. There are—at that particular landfill, health officials say there are about 4,000 drums of industrial waste that

have been illegally deposited in the past; is that correct?

Mr. ASCHE. Yes; that is correct.

Senator DORGAN. Are those in the process of being removed?

What is happening with those?

Mr. ASCHE. The process is I think in the initial stages of being—where these drums are being excavated. They are to be inspected—

Senator DORGAN. Are they hazardous, or not hazardous mate-

rials?

Mr. ASCHE. They are considered hazardous I think at this point, but that remains to be fully established by the State health depart-

Senator DORGAN. Mr. Redding, why do you indicate—give me your analysis of why you hold the opinion that if legislation of the type I have cosponsored would be enacted, that it would jeopardize your site. The legislation that I propose, although I probably would favor the expansion, deals with municipal waste.

I probably would think it should be expanded to deal with all waste, but if an informed decision is made on a matter like this with all of the facts, do you not think that if the facts overwhelmingly favor the fact that there is less risk and more opportunity here that people would reach that conclusion following the facts?

Are you concerned about the hysteria of the fear of the unknown? Tell me why you think this would shut down your activity, and I

also will ask the next witness that as well, Mr. Knudson.

Mr. REDDING. One statement just made about hysteria has been proven very true in the last 3 or 4 years, and I will say this very

candidly.

It is very easy to be a so-called environmentalist. You can say just about anything, and not have to back it up. All you have to say is I believe this is going to happen, I believe we are going to be contaminated, and have no reason to have any proof.

On the other hand, a company such as MSC must—must be very careful with everything they do, and everything they say, because

they are held liable, very liable.

Senator Dorgan. Well, let me indicate that I think in a discussion of something like this it is prone to enormous controversy. I recall the discussion about the proposal in Grant County to just begin to look at the prospect of studying the storage of spent nuclear fuel. You know, it generates enormous controversy on all sides, and it is-I mean, there is a counterbalance.

It is true that one could stand up and charge whatever one wants, and it moves around very quickly, these pieces of information. On the other hand, those-particularly if they are very large enterprises who wish to move in and do this activity also have substantial resources and substantial opportunity to move their mes-

So, there is a counterbalance, and I think most everyone would agree that no matter what the issue is, especially issues like this, it is best if the public is led by a set of facts to a conclusion that represents a rational conclusion with an assessment of the risks and the opportunities. I think everyone would agree that freethinking people possessing all the facts will reach the right conclusion about what they want for their future, and I think that is what all of us would hope with respect to issues like this as well.

I thank the three of you very much. You have similar responsibilities at the local government level and come to an issue and view it substantially differently. I was interested in hearing your perspective on it, and I hope you will be able to stick around for a bit

in the event that we might want to hear from you again.

Thank you very much from being here today.

Next I would like to ask Mr. Robert Knudson, who is the general manager of the facilities at Municipal Services Corp. in Sawyer,

ND. Mr. Knudson, please come forward and welcome today. We had asked USA Waste Services, a company that proposes expanding the landfill and using the landfill at Gwinner, to be present. They have sent us a letter indicating they were unable to be here today, but they have provided some information in the letter.

Mr. Knudson, thank you for being present, and we would be happy to hear your testimony if you prefer to summarize, and we will include your full testimony as a part of the permanent record.

STATEMENT OF ROBERT L.L. KNUDSON, FACILITY GENERAL MANAGER, MUNICIPAL SERVICES CORP.

Mr. KNUDSON. Thank you, Senator.

Senator DORGAN. Could you pull the microphone just closer, if

you will?

Mr. KNUDSON. Good morning, Mr. Chairman. My name is Bob Knudson, and I am general manager of Municipal Service Corp., Echo Mountain Facility, near Sawyer.

I appreciate the opportunity to appear before the committee to share our views. I will present a summary of my remarks, and a full written testimony for the record. Before I start, however, I

would like to tell you a little about MSC.

Mr. Chairman, I am a lifelong resident of North Dakota. I was born here, educated here, and I have raised a family here. I operated a construction business in Minot, and have always taken a great deal of pride in the well-being of this State and its people. I consider myself an outdoorsman, and someone who wants to protect North Dakota's environment for my children and their children beyond that.

This is why I also take great pride in our operation at MSC, and I know firsthand that we provide the best protection for the health of North Dakota's citizens and the well-being of its environment. If this were not the case, I would not be working for MSC today.

Mr. Chairman, the letter of invitation I received from the committee indicated that this hearing would focus on the interstate transportation of waste and the controversies that have developed over the importation and disposal of waste originating in other States. In order to address these issues, I would like to tell you why there is need for the interstate movement of waste, how MSC has constructed its facility, and what we have done to reach out to our community and be a good neighbor.

Before I do so, let me briefly outline the position of Union Pacific, MSC's parent, on the interstate commerce issue. Mr. Chairman, Union Pacific is made up of several companies, including rail, trucking, oil and gas, and environmental. Each is dependent upon the constitutional protection granted under the commerce clause and the ability to move items of commerce freely between the

States. Waste is no exception.

As Congress continues to debate the interstate waste issue, I encourage you to look at the broader implications of interstate barriers and the impact they may have as new environmental regulations come into place. Shortly, new regulations will be implemented requiring municipal landfills to upgrade facilities to include synthetic liners and groundwater monitoring equipment. This will likely fuel the need for more regional environmental management facilities and continued need to move waste between the States.

Mr. Chairman, as you are aware, there has been concern in Congress about the States' lack of options and the lack of ability to play a role in the decisionmaking process. We are Municipal Services, when we first started in North Dakota, did come to the municipalities. We came to the township, we had open meetings for the public to express exactly what we were going to do. At that time we made promises to the public, and to date we have kept every one of these promises right to the smallest item.

In reality, the State played an integral role in the permitting of Echo Mountain facility, and the formal permitting process already in place in North Dakota rules ensures public participation and

avenues for citizens to become informed and ask questions.

This process has resulted in many significant additional construction and operational conditions being included in the permit. Moreover, MSC regularly met with State officials and obtained approval through the permit from the North Dakota Department of Health for each stage of the project. This process continues today, and I might point out that our permit now consists of 15 volumes that are at least 3 inches thick, and they call out everything imaginable.

Mr. Chairman, it is important to note that MSC is permitted to accept only nonhazardous commercial and industrial waste which is defined as manufacturing or processing byproducts generated by industrial facilities. MSC has no intention to expand the facility to accept hazardous, radioactive, or any other type of more toxic waste.

We are dedicated to being a nonhazardous waste management facility. Before we treat or dispose of waste, we test samples of each shipment in our environmental laboratory to determine the characteristics of its content. Any waste shipment that does not meet the standards for nonhazardous industrial waste is rejected and sent back to the generator.

All of these provisions are carefully set forth through formal permit documents. We are now working with the North Dakota Department of Health to expand our permitted use to manage and

dispose of ash from municipal solid waste incinerators.

While the negotiations and the legal process associated with this permitting effort has been lengthy and involved, the discussions have resulted in numerous improvements being made to the permit, the facility, and its operations. Each disposal cell is constructed with a triple liner system and dual leachate collection systems. The triple liner consists of clay liner and two high-density synthetic liners.

These technical specifications meet or exceed all regulatory requirements, thus providing an excellent system for environmental protection. The result of the changes we have made to the Echo Mountain facility and its permit is that it is far more advanced than any other in the State, and with North Dakota's stringent standards, the facility is likely the most advanced of its type in the country. Our facility will set a new standard and serve as a model

for the future.

MSC believes that the best way to understand our operation is to see it firsthand. In keeping with this belief, we maintain an open-door policy, and invite all interested parties to schedule a visit to the facility. In fact, we employ a full-time onsite community relations representative to coordinate such visits. We are committed to being responsive to local concerns, and we believe our actions support this commitment.

Mr. Chairman, even before we purchased the site, we made clear our intentions and went to the community to ask for their support. We received that support and obtained a community host agree-

ment.

As with most industry, there are also economic benefits derived from the facility that are very substantial and worth noting. By the end of this year, capital investment will exceed \$19 million. We will employ 25 to 30 permanent employees, and 9 to 12 temporary employees with annual payroll of \$1.1 million. Our annual expenditures from continuing operations will be approximately \$3.5 million, and we will contribute annual tax revenues from sales, personal and corporate income tax of approximately \$550,000.

In addressing our transportation situation, I would like to clarify that most of the waste we receive is transported by rail to Sawyer where it is transloaded to trucks for the short trip to Echo Moun-

tain.

This waste is received in state-of-the-art, intermodal containers that are removed from the railcars and placed on special trucks. The waste remains in the container until it reaches the facility for testing, solidification if needed and, finally, disposal.

Our waste may be received in drum form by trucks directly at

the facility.

My concern is not necessarily the State of the origin of the waste, but rather the safety of its transportation. This process, Mr. Chairman, is also something I feel is being done properly, with the utmost concern for the integrity of the containers, the loading and the unloading process, the classification of the contents, the final steps before disposal, and the necessary contingencies in the un-

likely event of any handling errors.

Obviously, this is a complex operation with many different nuances beyond simple disposal. The truth is that not every State or manufacturer can afford to build such a facility, and not every geographic region is ideally suited for such a facility. For those companies willing to make the necessary investment and assume the liability, it is a matter of economics. The customer base needed to provide the necessary return on the investment usually cannot be found within the borders of any one State.

Additionally, generators of waste must seek the best facility because of the liability standards associated with Superfund and many other Federal laws. In fact, Mr. Chairman, for many of these very reasons North Dakota generators who do not have onsite management capabilities must export their hazardous waste to a num-

ber of other States for treatment and disposal.

Restrictions will limit a generator's ability to protect him or herself from liability and prevent the competitive marketplace from providing the lowest cost waste management options to manufacturers. If waste of any type cannot be transported to facilities that

provide maximum protection for human health and the environment, regardless of what State the facility is in, we will see a return to the midnight dumping days of the past that Congress has worked so hard to put in the bad chapter of the book of environ-

mental history.

Mr. Chairman, I recognize that facilities like Echo Mountain are not popular with everyone, but we believe that often the best we can do is continue to provide information about our operation to citizens and their elected representatives. With an active public relations campaign, a commitment to top quality operations, and a continued willingness to work with and be responsive to the community, we believe more people will come to accept the Echo Mountain facility and recognize the important environmental and economic contributions we make to North Dakota.

Thank you, sir.

[The prepared statement of Mr. Knudson follows:]

PREPARED STATEMENT OF ROBERT L. KNUDSON

Good morning Mr. Chairman. My name is Bob Knudson and I am the General Manager of Municipal Services Corporation's Echo Mountain Facility near Sawyer. I appreciate the opportunity to appear before the Committee to share our views and tell the story of the Echo Mountain Facility. Before I start, however, I would like to tell you a little about MSC and my role in the management of the Echo Mountain

Facility.

Mr. Chairman, I am a life-long resident of North Dakota. I was born here, educated here and raised a family here. I operated a construction business in Minot and I have always taken a great deal of pride in the well-being of this state and its people. I consider myself an outdoorsman and someone who wants to protect North Dakota's environment for my children and their children beyond that. This is why I also take great pride in our operations at MSC and I know, firsthand, that we provide the best protection for the health of North Dakota's citizens and the well-being of its environment. If this were not the case, I would not be working for

MSC today.

Now, I would like to tell you about MSC. First, to put things in perspective, MSC is a company owned by Union Pacific's environmental division, USPCI. USPCI is an integrated national industrial and hazardous waste management company with nearly three decades of experience in the environmental field. The company is committed to using advanced technologies to ensure safe, efficient and responsible waste treatment, recycling and disposal operations. USPCI and MSC are dedicated to helping other industries manage their waste and the potential liabilities associated with their waste in a safe and environmentally sound manner. MSC's interest in the facility dates back over four years when we agreed to purchase the site from its local owners. At that time, the facility was already permitted by the North Dakota Department of Health and Consolidated 1iboratories (NDDOH) to manage nonhazardous industrial waste and had, in fact, received a small amount of waste for disposal.

Mr. Chairman, the letter of invitation I received from the Committee indicated that this hearing would focus on the interstate transportation of waste and the controversies that have developed over the importation and disposal of waste originating in other states. In order to address these issues, I would like to tell you why there is a need for the interstate movement of waste, how MSC has constructed its facility and what we have done to reach out to our community and to be a good

neighbor.

Before I do so, let me briefly outline the position of Union Pacific on the interstate commerce issue. Mr. Chairman, Union Pacific is made up of several companies including rail, trucking, oil and gas and environmental. Each is dependent upon the Constitutional protection granted under the Commerce Clause and the ability to move items of commerce freely between the states. Waste is no exception. As Congress continues to debate the interstate waste issue, I encourage you to look at the broader implications of interstate barriers and the impact they may have as new environmental regulations come into place. Shortly, new regulations will be implemented requiring municipal landfills to upgrade facilities to include synthetic liners and ground-water monitoring equipment. This will likely fuel the need for more re-

gional environmental management facilities and a continued need to move waste be-

Mr, Chairman, as you are aware, there has been concern in Congress about the State's lack of options and lack of ability to play a role in the decision-making process. In reality, the State played an integral role in the permitting of the Echo Mountain Facility. The formal permitting process already in place in North Dakota rules, ensures public participation and avenues for citizens to become informed and ask questions. This process has resulted in many significant additional construction and operational conditions being included in the permit. Moreover, MSC regularly met with State officials and obtained approval, through the permit, from the NDDOH for each phase of the project. This process continues today.

Mr. Chairman, it is important to note that MSC is permitted to accept only nonhazardous commercial and industrial waste, which is defined as manufacturing or processing by-products generated by industrial facilities. MSC has no intention to expand the facility to accept hazardous, radioactive or any other type of more toxic waste. We are dedicated to being a non-hazardous waste management facility. Before we treat or dispose of waste, we test samples of each shipment in our environ-mental laboratory to determine the characteristics of its contents. Any waste shipment that does not meet the standards for non-hazardous industrial waste is rejected and sent back to the generator. All of these provisions are set forth through

formal permit documents.

As part of our prograin to upgrade environmental design and operational standards for the facility and expand its permitted use, MSC entered into discussions with the NDDOH and submitted a permit modification request. In addition to the facility improvements, this request would allow the facility to manage and dispose of ash from municipal solid waste incinerators. While the negotiations and the legal process associated with this permitting effort have been lengthy and involved, the discussions have resulted in numerous improvements being made to the permit, the facility, and its operations. These improvements include but are not limited to the following:

 Each permanent cell will be equipped with three liners: one five-foot thick liner of compacted clay (permeability of 10(-7)cm/sec.), and two synthetic liners (one 60 mil High Density Polyethylene, one 80 mil HDPE). In addition, the cap for the cell will include a three-foot compacted clay liner and another synthetic liner and a soil cover. These technical specifications meet or exceed all regulatory requirements,

thus providing an excellent system for environmental protection;

 When the North Dakota State Water Commission evaluated our cap design, they determine.
 * * Each cell includes a leachate collection system designed to detect and collect any liquids in the cell. When present, the leachate is pumped, tested and managed in a manner consistent with the permit;

 Each cell has its own system of groundwater monitoring wells. These wells will provide for early detection of any change in groundwater allowing for a quick re-

sponse;

 The facility's waste analysis plan is extremely rigorous. It is more conservative than that for any other North Dakota facility and will ensure that only waste permitted to be accepted is managed at Echo Mountain; and,

• In addition, the facility has a full-time independent environmental inspector present during operations, employed by the NDDOH.

These improvements add to the facility's topography which has naturally underlying high density, low permeability clay below the entire cell area. These upgrades represent only a few of the modifications to the earlier permit and make the facility even safer and more secure. The result is that the Echo Mountain Facility and its permit are far more advanced than any other in the state, and with North Dakota's stringent standards, the facility is likely the most advanced of its type in the country. Our facility will set a new standard and serve as a model for the future.

MSC believes that the best way to understand our operation is to see it firsthand. In keeping with this belief, we maintain an open-door policy and invite all interested parties to schedule a visit to the facility. In fact, we employ a full-time, onsite community relations representative to coordinate such visits. Additionally, MSC believes that we can make a contribution to the community and have established a Good Neighbor Trust Fund with the City of Sawyer, Brillian Township and the Sawyer Area Development Corporation. MSC is committed to the surrounding community, its growth and prosperity. Beyond what is done with the Trust Fund, we are active in sponsoring adult and youth sports activities, college scholarships, summer internships, community blood drives, and area civic organizations.

Before we purchased the site, we made clear our intentions and went to the community to ask for their support. Mr. Chairman we received that endorsement and obtained a community host agreement. It is my understanding that USPCI has done

this in every area where it has a major environmental operation.

In addition, MSC representatives have met regularly with citizens in the area to describe our operations and answer questions. We intend to continue this communication, and we are committed to being responsive to local concerns, and we believe our actions support this commitment. As part of our public education program, we held an Open House last year which hosted nearly 700 people. These guests received extensive briefings on five major project components: cell design; groundwater monitoring and protection; intermodal transportation and container design; laboratory operations; and local economic benefits. To date nearly 2,000 people have toured our facility and become educated about our operations and our strong commitment to environmental protection.

There are also economic benefits derived from the facility that are very substan-

tial. The highlights of these benefits are:

Capital investment will exceed \$19 million by the end of this year; 25-30 permanent jobs, 9 temporary jobs; Annual payroll of \$1.1 million;

Annual expenditures from continuing operations of approximately \$3.5 million; and,

Additional annual tax revenue (sales and use tax, personal and corporate in-

come tax) of approximately \$550,000.

In addressing the transportation question, I would like to clarify that most of the waste we receive is transported by rail to Sawyer where it is transloaded to trucks for the short trip to Echo Mountain. This waste is received in state-of-the-art intermodal containers that are removed from the rail cars and placed on special trucks. The waste remains in the containers until it reaches the facility for testing, solidification—if needed, and finally disposal. Other waste may be received in drum form but truck directly at the facility. by truck directly at the facility. My concern is not necessarily the state of origin of the waste, but rather the safety of its transportation. This process, Mr. Chairman, is also something I feel is being done properly—with the utmost concern for the integrity of the containers, the loading and unloading process, the classification of the contents, the final steps before disposal and the necessary contingencies in the un-

likely event of any handling error.

Obviously, Mr. Chairman, this is a complex operation with many different nuances beyond simple disposal. The truth is that not every state or manufacturer can afford to build such a facility and not every geographic region is ideally suited for such a facility. For those companies willing to make the necessary investment and assume the liability, it's a matter of economics. The customer base needed to provide the necessary return on the investment usually cannot be found within the boarders of any one state. Additionally, generators of waste must seek the best facilities because of the liability standards associated with Superfund and many other federal laws. In fact, Mr. Chairman, for many of these very reasons, North Dakota generators who do not have on-site management capabilities must export their hazardous waste to a number of other states for treatment and disposal. Restrictions will limit a generator's ability to protect him or herself from liability and prevent the competitive marketplace from providing the lowest cost option for waste management to manufacturers. If waste of any type cannot be transported to facilities that provide maximum protection for human health and the environment, regardless of what state the facility is in, we will see a return in the midnight dumping days of the past that Congress has worked so hard to put in a bad chapter in the book of environmental history.

Mr. Chairman, I recognize that facilities like Echo Mountain are not popular with everyone, but we believe that often the best we can do is continue to provide information about our operation to citizens and their elected representatives. With an active public education campaign, a commitment to continuing top quality operations, and a continued willingness to work with and be responsive to the community, we believe more people will come to accept the Echo Mountain Facility and recognize the important environmental and economic contributions we make to

North Dakota.

Senator DORGAN. Mr. Knudson, thank you very much. As I said, we asked a representative of USA Waste Services to be present, and they sent a letter. Following your testimony, Mr. Knudson, we are going to hear from two people who have a different opinion of the Sawyer and the Gwinner sites, and then just for all of your understanding I would like to open it up and have participation from anyone who wishes to participate.

Let me ask you a question on behalf of your company. Does your company feel that legislation of the type I support is appropriate? That is, should the States have the right to decide yes or no and make that decision stick, and if that legislation were passed, do you feel, as Mr. Redding does, that it would perhaps threaten to close facilities like yours?

Mr. KNUDSON. First of all, we feel very strongly, having worked with the North Dakota Department of Health for the past 4 years, that they are very capable of doing the job, making the decision whether or not a company or waste company should be permitted and at present North Dakota's rules are the most stringent in the

Nation, and we feel that is where it should be.

It should be in the hands of the professionals who deal with these matters everyday and take it away from the political arena so that the politicians do not have to address things that really in many cases they do not have the expertise or the backing to make these decisions on.

Senator DORGAN. Given the kind of waste that is now stored at

Sawyer, is it in your judgment without risk, in the long term?

Mr. KNUDSON, Yes.

Senator DORGAN. Those who will testify today later after you, and I assume there are others in the crowd, will make the point, and they have made it in the past, that this waste inevitably will contain some amount of hazardous material. Although it may not necessarily meet the definition of being classified as hazardous. there is no certainty that in the long term one can construct clay liners, and so on, that guarantees against leaching and groundwater contamination.

In your judgment, are they simply wrong on that, and is there no evidence that would support the contention that there exists

long-term risk here?

Mr. KNUDSON. Some past history and some of the statements that they have used that come from EPA, and it is past history, state that all landfills will leak. Well, with some of the old synthetic liners and without the expertise that we do have today, that was probably a true statement.

But today I would say no, with the high-density polyethylene liners that we use, the systems that we have to ensure that they are not leaking-because we do have tests that we do on a daily basis to prove that they are intact, are not leaking. We have leachate col-

lection systems that take the moisture out of the waste.

We develop small cells so that we can seal them up rather quickly-4 or 5 years would be the maximum lifetime of a given cell and then they are sealed and the top cap of our seal. There is nothing like it in the Nation or in the world, to my knowledge. It is an 8foot cap so that moisture cannot penetrate through.

A year after our cells are sealed, all of the leachate will have been pumped off, they will be monitored daily for many years. The permit calls that we have to monitor them for 30 years, but if we

are there for the next 40 years, it will be 30 years after that. So, yes, I feel very good about the system. If I did not, as I men-

tioned before, I would not be doing what I am doing.

Senator DORGAN. Mr. Knudson, if this is a growth industry, are there limits that we ought to consider in States like North Dakota?

Would companies like MSC at some point say, we have been enormously successful in storing nonhazardous material, we can demonstrate the same success and the same lack of risk to the surrounding area in storing hazardous material?

What do you see in the future with respect to your company and the growth industry of transporting and storing waste in other areas of the country?

Mr. KNUDSON. First of all, our company is large enough. We do have a good backer in Union Pacific, which is dedicated to do the job correctly, and they say if it is not done correctly, then—it will be done correctly, put it that way. That is the only thing they will

accept.

But as far as expanding, no. Our company is committed to nonhazardous waste in North Dakota. We have other facilities in other States, and our current contract with General Motors also handles their hazardous waste, and that waste does go to these other facilities, and we have no intention of expanding to anything other than industrial nonhazardous waste.

Senator Dorgan. Does the Sawyer landfill intend to continue to

pursue a permit for incinerator ash?

Mr. KNUDSON. Yes, we do.

Senator DORGAN. That would be nonindustrial. That would be municipal; would it not?

Mr. KNUDSON. No. That would be-

Senator DORGAN. That would be industrial incinerator ash.

Mr. KNUDSON. It would be industrial waste.

Senator DORGAN. How would you classify incinerator ash? I understand it is classified as nonhazardous, but how would you describe incinerator ash vis-a-vis the mud that was described, or the industrial waste described as largely mud from General Motors?

Mr. KNUDSON. A physical description would be household garbage that is incinerated in a state-of-the-art incinerator. It is not like in a burning barrel. It is in an incinerator that rolls the grates, rolls the waste, and it is thoroughly burned. It minimizes the quantity, naturally, through the burning process, and when you get done with it it is very similar to the ash you would get from your fireplace.

Senator DORGAN. Let me just parenthetically say that my own view supports those who say we should have substantially more recycling. I also feel that we probably ought to impose a moratorium on additional incinerators for now in order to force recycling pro-

grams to move forward.

I know that is an aggressive step. I realize that others contend that we should build more incinerators. As long as we build more incinerators, we will keep incinerating waste. I would like to see us create conditions in which we force substantially additional effort to recycle in this country, which I think will relieve a number of our problems.

Mr. Knudson, if you will be able to stay, and I hope you will for

another 45 minutes or so-

Mr. KNUDSON. Yes.

Senator DORGAN. I appreciate your testimony, and I would like to ask the next couple of witnesses to come forward.

Mr. KNUDSON. If I may make one comment-

Senator DORGAN. Yes.

Mr. KNUDSON. Our company is one of the largest recyclers in the Nation, our parent company, so we do very much believe in recycling.

Senator DORGAN. All right. Mr. Knudson, thank you very much. Next we will ask Darlene Rau from Max, ND, and Vern

Stallman, from Morton, ND.

While we are beginning this—and again, let me emphasize, as soon as we finish your testimony, I would like to open this up for anybody who would like to contribute. That will occur in about 10 or 15 minutes.

I would also say that this record for this hearing will remain open for comments if you wish to submit them for the record. We will hold them open for 2 weeks, and if you will send them to the Senate Commerce Committee or to my office, we will see that your comments are also made a part of the hearing record.

Let me call on Darlene Rau. Darlene, would you proceed?

STATEMENT OF DARLENE RAU, MAX, ND

Ms. RAU. Hi. I want to thank you for inviting me, and I have been up all night working so my boss finally let me off, so I was glad I could make it. I got here a little late, but I am glad I finally got here.

My testimony really is not for everyone.

Right now at our universities, we are doing research on biogenetics, crossing chicken livers with tomatoes and types of things to change our food supply. Some people probably think it cannot be done. I do not know. I am not a scientist, but I see things like this are done all the time.

We talk about a safe landfill, and that is kind of a joke. The Roman Empire thought they had everything perfect, yet they used

lead in their pipes and poisoned themselves.

The Queen of England sent an expedition up around the Arctic Ocean trying to find a new route. Everything was planned. It was perfect. It took 140 years to find out what happened to that expedition, and it was only found out in 1987, 140 years later, that those

people died from lead poisoning on that expedition.

Here we are dumping things like lead on our soils. We do not know where it is going to take us. There are two things in the Gwinner site and the Sawyer site that are alike, and it concerned me a lot. Both of these sites we look at as wasteland. And we think ah, perfect place to make an industry and dump garbage. We can make big bucks here. Both of the sites have high water tables and springs in the area. That is why they are not farmed. So, we say hey, you know, this land is useless. It is not being farmed. Let us just fill it with garbage.

But there is a use for it. It is our aquifer. And in Ward County, that happens to be the biggest aquifer. And now, we are tempting God by putting damaging garbage on top of it that can ruin an aq-

uifer for a vast area.

I am really surprised, maybe outraged, when I hear people say let the experts decide. The experts did decide on the Sawyer site. I hope everyone remembers they denied the permit. The problem is we hire a team of lawyers and challenge it. So, then you get rid of the guy that made the decision, the expert, and you put new ex-

perts in that you pay. That is kind of a dumb way of doing things. But the experts did decide, and I am willing to let the decision stand. With the experts, when the experts said it was bad, I realized they must have had a reason for denying that permit. Yet here we are going forward again because we have got lots of bucks backing us.

Well, North Dakota is not for sale. And I think having garbage on interstate commerce law is a challenge for some lawyer right now. When I looked it up in Webster's dictionary, it said that commerce is trade. OK. Supposedly we have grain as interstate commerce. I think we sell our grain, however, I think some times we are giving it away.

But supposedly, wheat is sold. It is an item of commerce. I hope no one in this room will tell me that North Dakota is buying gar-bage from all over the world. We are not buying that garbage. So, what is the item of commerce? There is no item of commerce.

So, I think the law should be challenged right there, because I do not know what it is that we are buying. But I do know one thing. We are selling our clean land, our clean air, and our clean water. We are selling that for what? We are not making money on it. Someone probably is. So, I think interstate commerce laws with garbage on it is wrong in the first place.

Our country in North Dakota here is the bread basket, and we do feed a lot of the world. Putting this garbage on it, we are challenging whether we are going to destroy it are not. I know we have hybrid. We have—it is a danger to try and challenge it by destroy-

ing what cannot be cleaned up.

The Sawyer site, in particular, is in a large watershed area that goes into the Souris River which goes into Canada. There is one thing about landfills I know. I am not a humanist, but I know a lot of the engineers are humanists and they think they can engineer anything. How can you engineer something that you have not tried, and you say it is state of the art?

Several years ago, 3, 4 years ago when MSC came to Sawyer they said they had a state-of-the-art facility. But they have modified it 10 times. Well, if we would have taken what they gave us in the first place I guess we would not have had state of the art,

because now it has been changed 10 times.

I do not have a degree in engineering, but I could tell that the site they have a gopher could destroy it. So, now, they put another liner on there. Well, maybe I could see that, but how many things can I not see? And how many things can no one else in this room see?

We have a freeze-thaw problem in North Dakota that has not been challenged other places. We cannot build a road that can withstand the freeze-thaw. They heave, they break up, that is where our tax dollars are going, for our roads. How can we engineer a landfill that that is not going to be effective on? It will break up eventually. And when it does, we have put things in there. I know there is a question of whether they are hazardous or whether they are not.

But right now in Arizona or New Mexico we have people dying, we do not know why. We have things that come up. I know we think we know everything, but we do not. This winter in Arizona a landfill opened up because of their huge amounts of rain. They asked high school kids to come and pick up the needles, the bags of waste that were along the road, dangerous some of it, along the

river beds in the Gila River in Phoenix. This is happening.

When this opens up and this lead spreads out on the wheat fields of North Dakota and into the Souris River, there are many towns that draw their water supply from the Souris River. Should we not care about those people or should we build big pipes and pipe in water from someplace else that hopefully has not been contaminated with garbage also? This is a dangerous thing to do, and we should have the right to say no.

I realize you can hire six PR people and try and sell your site, but if this site is good it would have sold on itself. If this was good economic development the people of North Dakota would have bought it without hiring people with unlimited bank accounts to sell it. There is a problem, and the people of North Dakota are not stupid. They see that there is a problem. And that is why they are challenging it. And a few bucks should not ruin it for everyone.

It will make this place unlivable if we just bring garbage in, and this is only the foot in the door. It is going to be kicked wide open. We see that there is a Sawyer site, we see that there is a medical waste incinerator proposed now for New Salem, there was a company that wanted to come to Dickenson and use the old charcoal briquette plastic cleanup contaminated soil. The strange thing about that was when their economic development plan in the town gave them the site, they did not want the part that was contaminated. But yet their company dealt with cleaning up contamination. They should have taken it all and cleaned it up. So, there are always problems you can see with each of these sites.

The Gwinner site, we had one proposed for Richland County. This is going to just be the foot in the door that kicks it wide open. And what will happen to North Dakota? Well, we will have big huge garbage dumps with buffaloes running across it. I guess that

is what Stanford University had in mind in the first place.

Thank you.

Senator Dorgan. All right. Thank you, very much. [Applause.] Mr. Stallman.

STATEMENT OF VERNE STALLMAN, MOORETON, ND

Mr. STALLMAN. Good morning, Senator. Thank you for the invitation.

I got started in this when the largest landfill operator of hazardous waste tried to develop in my area. They were physically trying to buy out some options on land. That is the beginning. From there,

I have done some traveling.

I will try to explain the landmark case of garbage in the United States and how this relates to us. In Sumpter County, Alabama, where Emelle Dam is located, a hazardous waste landfill came on line in 1978. The area residents were told they had the perfect geology and the dump would not leak for 10,000 years. That perfect geology is chalk for a couple hundred feet and it has many fractures and faults allowing liquid into the aquifers below. In short, like all landfills, it leaks.

The unemployment rate for Sumpter County was 5.6 percent in 1978. This increased to 21.1 percent by 1986. They lost several industries and small businesses, including Weyerhaeuser plywood factory. Houses are a dime a dozen. The area around these sites suffer economic development in reverse. The only jobs they attract are of the minimum-wage type.

For an example, in 1984, the home of the mayor of Emelle was appraised at \$55,000. In 1986 he had his home reappraised to get a home improvement loan from the bank. It was valued at \$15,000, \$20,000. When he was asked why, he was told that he lived too

close to the dump. He did not get the loan.

By the way, that mayor was also the superintendent of the school.

Emelle has received waste that was not permitted. At the time I was there in February 1992, these people said they were sure

they were receiving radioactive waste and dioxins.

In 1983, the Toskaloosa News said that the there was contaminated water that came from the disposal facility in Sumpter County that does not handle radioactive material. But the State official said that the water appears contaminated with a small amount of

radioactivity.

security reasons.

It took until February 21, and another newspaper, this one from the Meridian Star, a Government contract has acknowledged that shipping papers were altered throughout the 1980's to hide the fact that radioactive waste from nuclear weapons plants were improperly disposed of in Alabama and eight other States. The references to the uranium were deleted from the shipping papers for national

Although the original site encompassed a few hundred acres, 340, it has increased to 2,700. The site is an in-ground type. The cells are 500 feet long, 500 feet wide, and 150 feet in the ground. At the time I was there they were on the first cell to be lined with plastic. The plastic is the thickness of a quarter. No plastic liner manufacturer guarantees their plastic because in the process of manufacturing air bubbles are inevitable. There will be holes. There will also be holes because in the process of laying, any sharp object punches holes. At best, the liner will give a secure site for a year or so. At worst, it is of no value.

EPA has found that absolute prevention of migration of waste through synthetic trenched liners is beyond the current technical

state of the art.

Waste sites have a leachate pond. Some of the leachate that congregates at the Emelle site is loaded aboard a tanker, transported to west Texas, and pumped into a deep well. This leachate is considered a very toxic chemical soup. The people of western North Dakota cannot tolerate a chemical soup of this type being pumped

down an abandoned oil well.

With the amount of the illegal dumping at the Gwinner site and the fact that on May 20, 1992, EPA published a notice in the Federal Register to redefine "hazardous waste." By EPA's own estimate, the new rule would exempt 66 percent of the presently defined "hazardous waste" from the RCRA—Resource Conservation and Recovery Act. This will now go into the solid waste type landfill.

Also, once a hazardous waste permit is issued no governing body has a veto over a RCRA/HSWA permit. In other words, the legislature, nobody can change it. It is a government unto its own.

I am going to touch the Alabama Supreme Court, and a lot of my information is garnered out of this, and I will also show—there will be a short spot in there showing the frustration of even the Jus-

tices of the Supreme Court of Alabama.

On July 11, 1991, the Supreme Court of Emelle, AL, rendered its opinion on an act that the Alabama legislature enacted and the Governor signed into law. The act imposed two fees on the disposal of hazardous waste at the commercial facilities in Alabama. A base fee of \$25.60 per ton was imposed on all waste and substances disposed of at commercial facilities, regardless of the State origin.

An additional fee of \$72 per ton was imposed on all waste substance generated outside the State of Alabama and disposed of at the Alabama facilities. That act also included a "cap" provision, limiting the amount of hazardous waste that can be disposed of at any affected facility. The cap provision was ruled unconstitutional. The base fee and the out-of-State fee was ruled constitutional by the Alabama court and all justices concurred.

Justice Houston also issued a blistering statement:

Until the U.S. Supreme Court holds that hazardous waste—what the trial court found contained poisonous chemicals that can cause cancer, birth defects, genetic damage, blindness, crippling, and death in an article commerce—protected by the commerce clause of the U.S. Constitution, I refuse to declare the fee provision of the act which was duly enacted by the Alabama legislature and approved by the Governor of Alabama unconstitutional as violative of the commerce clause of the U.S. Constitution.

If the U.S. Supreme Court holds that waste containing poisonous chemicals that can cause cancer, birth defects, genetic damage, blindness, crippling, and death is an article of commerce protected by the commerce clause of the U.S. Constitution, then I am bound by that ruling under the supremacy clause of Article 6 of the U.S.

Constitution. Alabama lost that battle over 125 years ago.

In the summer of 1992, the U.S. Supreme Court overruled the Alabama court as violating the Constitution. This, in effect, put the entire subject back in the domain of Congress if we want it

changed.

Until we in this State can have some control of what enters this State for disposal, our natural resources are going to be desecrated. For example, the elevator in Mooreton had an identity preserve contract for wheat to Pillsbury for quality control of a specific variety of wheat. Several hundred thousand bushels of wheat were sold to them at a good premium to us farmers. I ask the representative of Pillsbury if they would aggressively buy our wheat if a hazardous site was near. His reply: "Hell no." They would aggressively try to keep it out of the channel. Had I not heard of the Alar scare out west.

This dump is located on or very close to the Gwinner channel of the underground water. It has an estimated yield of 1,000 to 1,500 gallons per minute, which is a very high yield, and there are numerous springs in the dump area. This channel joins with the Hankinson aquifer, where the pumps that feed the southeast rural water system and its 1,000 miles of pipeline are located. Again, a State must be able to control this type of desecration. This dump should have never been placed there in the first place.

In 1989, about 40,000 trucks unloaded their chemical soup at Emelle. To monitor leachate and hazardous leakage, it was estimated that about \$1.5 million per year is spent. It is apparent these people do not feel—I am referring to my own area now—it is apparent these people do not feel trucks are sufficient to desecrate our area. Rail Waste, Inc., was formed on July 1, 1992, and signed by John Beardmore's secretary, the most egregious violator

of landfill regulations in the area.

Unit trains of waste do not make the people of my area feel any more comfortable. Because this waste is permanently stored in the host State. The risk to health and safety of the people of the host State will continue in perpetuity. The cost to the State of regulation and monitoring of the facility will continue in perpetuity. A disproportionate share of these costs will be borne by the taxpayers of the host State for the waste dumped by other States in perpetu-

I feel States should be provided with the authority to regulate the interstate transportation and storage of municipal and solid

waste.

Thank you, Senator.

Senator DÓRGAN. Mr. Stallman, you are one of the fastest readers that I have ever had testify at a hearing. [Laughter.]

Mr. STALLMAN. Thank you.

Senator DORGAN. You worked your way right on through that.

Thank you very much for your testimony. The reason I said that—I did not mean to be cute—is about 2½ pages double spaced is 5 minutes, generally speaking, and you had 4½ pages and you got through pretty close to 5 minutes, and that was pretty rapid. We will give you a rest for a minute here.

I am going to ask just one or two questions, and then I would like to, for 30 minutes or so, to hear if we can just a minute or two limit on each of you. I know some others want to contribute pro

and con on these issues.

Ms. Rau, why the difference in your perspective versus Mr. Knudson's perspective. I have met him on a number of occasions. He is a very thoughtful, bright person who admittedly works for the company that stores waste, but also lives in the area and is a native of the area. He feels that this is largely without risk and that they are using state-of-the-art storage technology.

You, on the other hand, reach a completely different conclusion.

Why the difference?

Ms. RAU. Well, I suppose I am not a humanist so I do not trust in the things that humans do in that sense of thing. I do not think we can make things safe. I do not think we should challenge Moth-

er Nature and can do these things.

I feel lead is dangerous to us. I do not take drugs, I do not smoke, I feel they are a danger to my body. I also feel someone dumping lead and poisons on my aquifer would endanger—North Dakota is a land flowing with milk and honey, supposedly. We are going to destroy that.

I mean, even Roosevelt said, "a Nation that destroy's its soil destroys itself." And if we are not on a collision course with what Roosevelt said, I do not know what we are doing. That is my per-

spective of looking at it. I feel that they cannot make it safe.

If they can make it safe, why all the violations? Why have they been fined so much? Why have they done these things? I do not feel—and they have already changed—like I said, I grew up in the area, I know the springs are there. I hauled water as a kid from

those springs, I know what is there.

My parents met in that mine. That is where my mom cooked and my dad was a pick-and-shovel operator in those mines. They talked about the water. They talked to many, many elderly people in that area that I feel where wisdom comes from, and they talked about all the water. That is why they put mining in those areas. Now, to dump on it is challenging God if nothing else that hey, we are big and strong, we can control it. I do not believe we can.

I was a kid picking rocks. I have seen how the freeze-thaw brought the rocks out of the ground. I asked why? Why did that happen? Why did those rocks come up? The earth is constantly moving. We cannot do something that is permanent. What is put will come apart. It is nature. If you put it, it will come apart even-

tually.

And so I do not trust that they can do it. They cannot monitor it, they cannot put it there, and I can see beyond that. I know the reason the company is here and that is one reason, to make money. And there is nothing wrong with making money, but it is the love of money that is the root of evil. It is nothing wrong with the money, but it is the love of it. And I can see that they are using North Dakota for their love of money to dump you.

If not, this economic development that is so great could be made

just as safe in Minnesota or wherever the garbage comes from.

Senator DORGAN. If you will remain there, is Mr. Knudson back in the room?

A VOICE FROM THE AUDIENCE. He will be back.

Senator DORGAN. OK, he will be back shortly, I am sure.

The State legislature has dealt with some of these issues and we have been talking about a Federal piece of legislation today. I see a couple of legislators here, Jennifer Ring, a State representative I know has introduced some legislation. Jennifer.

STATEMENT OF JENNIFER RING, STATE REPRESENTATIVE, GRAND FORKS, ND

Ms. RING. Thank you, Mr. Chairman.

I am not going to repeat things that have already been said today. I want to make a couple of points, particularly for the congressmen who are not present today.

One point, that it needs to be clear to people from more populous areas is that there is a vast difference in size between the commercial sites that are talking setting up here and anything that North

Dakota is used to monitoring or dealing with.

One of my favorite little statistics is Fargo is North Dakota's biggest town by far, and if we took all the waste for Fargo, West Fargo, Cass County, Ransom Country, Richland County, Sargent County, Steele County, and Traill County, it would still be less than 500 tons per day for a year. Whereas the sites that we are talking about here are talking about bringing in 800, 2,000 tons per day.

We are not used to dealing with that. One of the problems, and I have worked on this now for 2 years, that we have had in the State is when we just see a need to regulate these very large commercial sites. Every time we see a need to deal with them, somebody walks up and hits the committee over the head with the dormant commerce clause and says if you do that, that will be unconstitutional.

In fact, one of the most touching things that I ever received in the last 2 years was a letter from a township officer up in the township where the Echo Mountain facility is located in which that township officer enclosed letters that they had been receiving up there threatening them with lawsuits which they would lose because it was unconstitutional what they were doing. And as a result they would all have to raise property taxes to the point where everybody in the township would have to sell their land back or give their land back to the township in order to pay taxes they would owe to pay on this lawsuit.

Because the dormant commerce clause has been so broadly interpreted and because we have to be so careful about what we say—you do not just have to worry about saying well, we are gong to do something to out-of-staters we are not going to do to us. If you do something that affects disproportionately, then maybe they have grounds for suit. They may not win, but they have got grounds.

For the State of North Dakota, I can look at a lawsuit for the State and go, tough, we have one of the best attorney generals in the Nation, we have got a good department there, they will fight that lawsuit and we will win. But for little townships or counties to have somebody come in and say if you do this or that to us, if you make this or that regulation that regards us, we are going to take you to court. We have got 15 lawyers and we can tie you up there for a long time and will win, that is very, very frightening.

I would sincerely request that Congress do activate the commerce clause in this area. Give us some real guidelines. That is one of the things I appreciate very much about the bill you are cosponsoring, sir, is that it provides definite guidelines on which to make decisions. It happens to be not what I was doing because I was not making distinctions between in State and out of State. But it allows us to make some in-State/out-of-State distinctions on clear guidelines and know that when we have done them, tough, you are not going to be able to take us to court. And I think that that is very important for the small towns of North Dakota.

Senator DORGAN. Thank you very much, Representative Ring. If there are others who wish to speak, we have a couple of microphones here, please identify yourselves if you wish to come to the microphones.

Representative Gulleson.

STATEMENT OF PAM GULLESON, STATE REPRESENTATIVE, RUTLAND, ND

Ms. Gulleson. Thank you, Senator Dorgan. I am pleased to have this opportunity to speak in front of your committee today also.

I serve in the State legislature and represent District 26 where the Gwinner Dakota landfill is located. So, my work in the legislature this winter reflected a lot of my concerns about what is hap-

pening down there.

What is interesting about the way I came to know about the landfill expansion in Gwinner is that it was all done so secretly, so quietly, and I was let know about it by a couple of people who had been contacted to have their land purchased by the company, and therefore did a lot of research into it to find out that there was,

indeed, a very, very large expansion plan under way.
When I contacted some of the people in the township, Jim Ashe for instance, who cannot live more than—I do not know—no more than a mile, a mile and a half from the landfill, he had no idea that any of this was underway. He knew, of course, about the landfill. Everybody understands it down there. They have worked with the landfill for a long time. That landfill serves the region down there just fine. And there has not been any opposition to that.

What the people are very much opposed to is this huge expansion. What they were shocked by and perhaps disgusted with was the secrecy by which this type of a plan would take place.

And so I think that in some of the bills that we tried to bring forth in the session then was to bring more laws that would protect the citizens and the financial assurance of the people that live in the areas of these things, because they, by and large, do not gain financially as the companies do. And in the instance of, I guess, both Sawyer and Gwinner, those are large out-of-State companies with their main base in other areas. Dallas, TX, is the home base of USA Waste.

So, I am very pleased that you are bringing forth this legislation. I certainly support it very much. The companies try to sell this as economic development. There have been a number of groups in North Dakota that have gotten behind these companies saying that yes, this is indeed economic development, and listen, North Dakotans, we do not have much else to offer so you had better grab on to this.

The citizens of Gwinner area and southeastern North Dakota disagree 100 percent. They know economic development when they see it. They have the largest Melroe plant in the State, they are extremely proud of it. They support it. But they do not think garbage is economic development and they do not want to accept it as that.

And I said before, they have been supportive of this landfill. They are not trying to say we do not want any place to dump. They understand we need to responsibly dispose of the garbage we generate. And that landfill does that for the region. We do not want to bring in 200 tons, and I saw the agreement that was initially signed by the landfill—or by the township. That agreement goes up to 5,000 tons a day, so that is a lot of garbage.

Senator DORGAN. Thank you very much. Mr. Knudson, could I just ask a question of you, if you would grab the microphone there.

Darlene Rau raised the question of lead a number of times. Any

nonhazardous landfill, that is a landfill in which nonhazardous waste is being deposited, what kind of lead content is permissible with it still being classified as nonhazardous?

Mr. KNUDSON. There is lead in almost everything. And the quantity is the question here. If you would take a sample in any field along a North Dakota highway and analyze that I would think that

you would find many, many times more lead in that soil that you are growing your wheat in than you would find in the ash that we are anticipating to deposit.

Senator DORGAN. All right, thank you very much. Let me ask the person behind you, I am going to ask the health department for some information about the properties of incinerated ash, particularly with respect to lead and some other things. I am interested in that subject.

Yes, Ma'am. Would you identify yourself?

STATEMENT OF MELISSA BRUNSVOLD, FIELD STAFF DIRECTOR, CLEAN WATER ACTION, FARGO, ND

Ms. Brunsvold. Yes. My name is Melissa Brunsvold, and I am the field staff director for the State of North Dakota for Clean Water Action. I just want to rise briefly in support of S. 439. Clean Water Action has worked with people across the State of North Dakota in communities like the folks from Bismark working on the medical waste incinerator, the incinerator ash, fighting the incinerator ash dump in Sawyer, hazardous waste dump in Richland County, and also continue to work with the folks in Gwinner right

On behalf of these folks and the 20,000 North Dakota residents that have opened their check books and given to Clean Water Action to fight this frustration, I would like to say we need this bill. We need for the citizens of North Dakota to be able to say let us not make the breadbasket the trash basket.

Senator DORGAN. All right.

Yes, Ma'am. Would you identify yourself?

STATEMENT OF JONI RAHRICH, BISMARCK, ND

Ms. RAHRICH. Hello. My name is Joni Rahrich. Thank you for

this opportunity to speak today.

A little over a year ago, a med-waste incinerator was proposed for Bismarck. Together with several other people, we decided to fight it. We petitioned for an initiated ordinance to ban it. In 4½

days we got nearly 2,000 signatures.

Once consumed by the knowledge of how the waste industry operated, it became apparent that our problems did not end with the incinerator. Initiated Measure No. 7 was drafted. In roughly 1 month's time, 15,000 or so signatures were gathered, and it was on the ballot. We lost by less than 200 votes. Almost exactly one-half of the people voting of this State wanted something done.

Today, we were told that 5,000 signatures were gathered in 21/2 weeks. It is apparent people want some say over what happens

here.

The waste industry contributes PAC money to our legislators. Some reject it, some accept it. Some legislators get mad at us when we initiate a measure or a referral. They say we are doing their job. It seems to me their job is to listen to what the people want. As citizens, we do not have the money to fight the industry, but we have a voice, and our voices are saying we want control of our State.

Finally, I am very tired of having my intelligence insulted by the waste industry. Our information on the med-waste incinerator came from the Centers for Disease Control, pretty factual, I would say. The waste industry claims to be so environmentally conscious, yet they are the ones who do the polluting. Kind of a contradiction of terms.

Thank you, Mr. Dorgan, for this legislation. I strongly support it for myself, my family, and the people of the State. A lot of people in power do not have the guts to support this bill, but maybe if they wait a few months they can get some from out of State.

Thank you. [Laughter.]

Senator DORGAN. Thank you very much.

Mr. Delmore from attorney general's office indicated that he might be able to respond to my previous question. Would you be

able to do that?

Mr. Delmore. Thank you, Mr. Chairman. You asked about the amount of lead that could be in nonhazardous waste, especially municipal ash and comparable wastes. There are certain wastes that are exempt from hazardous waste regulation only by Federal law or rule. The waste could have amounts of lead, cadmium, or mercury, above hazardous waste levels and still be classified as nonhazardous. So, in this case, you could have ash going into a landfill which is over the hazardous waste levels but is classified as nonhazardous.

Senator DORGAN. Because a type of waste such as incinerator ash has been determined to be put in this classification notwith-

standing its lead content?

Mr. Delmore. Yes. It is put there because of the exception for that type of waste. It is not looked at because of its particular characteristics.

Senator DORGAN. All right. I want to get some additional information at some point. I appreciate very much your contribution.

Let me ask how many people wish to contribute additional comments today? Could I see a show of hands? One, two, three, four, five.

I would ask that we stick to a 1-minute rule, which is a rule of the U.S. House of Representatives, the Senate has no rules on debate, so when people get up they largely speak until they are exhausted, which is well beyond the time they have exhausted most productive thought. In the House they have a 1- and a 5-minute rule. So, I learned for 12 years how to speak in the 1-minute rule. I would ask if you might accommodate me on the 1-minute rule.

Representative Coats.

STATEMENT OF JIM COATS, STATE REPRESENTATIVE, MANDAN, ND

Mr. COATS. Thank you, Senator Dorgan. I am Representative Jim Coats, District 34 of Mandan, a member of the North Dakota State

House of Representatives finishing my second term.

I have heard most of what has been said today before, and I am sure that during the interim on the natural resource committee I will hear it over and over again. I have some points that I have not heard much about today. I have heard about the proper encapsulation and enforcement for environmental protection, the tensile strength of the liners, and the possibility of exceeding this strength

from the increased quantity of waste that is going to be deposited within the liners.

The increase in concentration of hazardous waste due to the increase of quantity being deposited, the municipal and industrial waste, privately owned waste sites and municipal owned waste sites, and I am sure that some place there is going to be an amendment come up in S.R. 439 to limit the amount of land that we can take out of production for waste sites.

And I am going to extend my hand to you, Senator Dorgan, that

I think S. 439 is a step in the right direction. Senator Dorgan. Thank you, very much.

Would you identify yourself?

STATEMENT OF DORIE REISENWEBER, BRITTON, SD

Ms. REISENWEBER. Senator Dorgan, thank you for bringing this hearing to the people who are being targeted by the waste industry. My name is Dorie Reisenweber, I am from Sargent County. I am going to skip to the main thing I have to say.

Until the transportation of interstate waste can be stopped, States and industry will not deal with their wasteful consumption of our finite natural resources. The United States needs front-end solutions, laws to reduce or halt the generation of toxins, laws to require the reuse of products whenever feasible, and laws to require recycling of all possible material.

Senate bill 439 protects materials destined for reuse and recycling. Only after all of the RRR solutions have been fully implemented should landfilling and incineration be employed. And then only under the most stringent of Federal and State regulations regarding the facility's operation and monitoring to ensure the greatest safety to the surrounding environment and to the people who would be affected by any mishap.

It is well that the bill requires there be no discrimination against particular landfills or incinerators. The interstate commerce law protects competition. However, when former President Bush established the Commission on Environmental Quality the waste indus-

try had more representation than any other industry.

Once the United States is limited to 1,000 regional mega landfills the larger waste companies are in a position to monopolize the waste industry. Waste executives have admitted that. Waste executives have admitted that the EPA's new landfill regulations favor

their monopoly.

Regional mega landfills and incinerators do not readily lend themselves to competition. We have to say no to things in Government which do not make any sense. Among those things are mega landfills, multi-State incinerators, and the interstate transportation of waste, be it solid municipal, hazardous, or nuclear. The protection of the minority, be they in impoverished areas of populous States, rural communities, or on reservations, is a responsibility of the Federal Government.

Thank you again, for the opportunity to voice our support for

Senate bill 439. Thank you.

[The prepared statement of Ms. Reisenweber follows:]

Prepared Statement of Doretta Reisenweber

Thank you for bringing this hearing on the interstate transportation of municipal waste to the people who are being targeted by the waste industry. Disposing of so much waste at one large site is not the solution to the waste problem. Rather, megalandfills establish the long-term distribution of pollution problems on a gigantic scale. There are very few other situations which could create such potential harm to the people short of war.

The federal government may regulate interstate commerce to promote the general welfare. Thus, it is against the law to use interstate transportation in the sale of adulterated goods. The dangers associated with the trafficking of waste and its sub-

sequent disposal in other states do not promote the general welfare.

The EPA itself admits that megalandfills are not safe. (Rachel's Hazardous Waste News, # 268, 1/15/92). The liner companies guarantee their product for only twenty years. (Ibid.) But beyond that, the vast tonnage of mixed municipal solid waste presents a monitoring problem in rural states with insufficient funds for adequate policing of the disposal operations of megalandfills and multi-state incinerators.

Senate Bill 439 states that no identified hazardous wastes may be disposed of in a municipal solid waste landfill or incinerator. However, according to 40 of the Codia municipal solid waste landill or incinerator. However, according to 40 of the couffied Federal Register, Parts 261 and 262, the largest classification of hazardous waste known as characteristic waste may be disposed of at municipal solid waste landfills. If a single generator of such waste produces less than one hundred kilograms (100 kg) per month, it may be mixed with municipal solid waste and disposed in a regular MSW landfill. The amount of such waste can exceed over half a ton per year from just one source. The waste industry may collect such waste from many sources. The quantity disposed in any one site could be huge. States must have the right to say no to out of state municipal waste.

have the right to say no to out of state municipal waste.

Until the transportation of interstate waste can be stopped, states and industry will not deal with their wasteful consumption of finite natural resources. The US needs front-end solution—laws to reduce or halt the generation of toxins and other dangerous substances, laws to require the reuse of products whenever feasible, and laws to require the recycling of all possible materials. Senate Bill 439 protects materials destined for reuse and recycling. Only after all of the "3 R" solutions have been fully implemented should landfilling or incineration be employed-and then only under the most stringent of federal and/or state regulation regarding the facility's operation and monitoring to ensure the greatest safety to the surrounding environment and the people who would be affected by any mishap.

This bill provides the impetus toward that goal. Current waste laws need to be strengthened. In the past there has been a tendency toward deregulation and the weakening of such laws. Those making waste policy have made it from the top down, and the people who could be most affected have not had direct involvement in determining policy. Senate Bill 439 provides for input from the targeted rural mi-

norities.

The bill's gradual reductions on out of state waste are necessary. Currently at least eighty percent (80 percent) of the waste received at the landfill near Gwinner, ND, comes from out of state. (See p. 187 from the Lake Agassiz Solid Waste Management Plan, District V, North Dakota, Dec. 1992). If the expansion request is granted, out of state waste will amount to about ninety-seven percent (97 percent) based on 2,000 tons per day, 50 tons being district waste. (Grand Forks Herald, April 12, 1993, page 1)

It is well that the bill requires them he as discrimination against particular land.

It is well that the bill requires there be no discrimination against particular land-fills or incinerators. The interstate commerce law protects competition. However, when former President Bush established the Commission on Environmental Quality, the waste industry had more representation than any other industry. (RH #268, op.cit.) Once the US is limited to 1000 regional megalandfills, the larger waste companies are in a position to monopolize the waste industry. Waste executives have admitted that EPA's new landfill regulations favor their monopoly. (Ibid.) Regional megalandfills and incinerators do not readily lend themselves to competition.

We have to say no to things in government which do not make any sense. Among those things are megalandfills, multi-state incinerators, and the interstate transportation of waste—solid municipal, hazardous, and nuclear. The protection of the minority be they in impoverished areas of populous states, rural communities, or on reservation—is the responsibility of the federal government. Thank you again for the opportunity to voice our support for Senate Bill 439.

[Rachel's Hazardous Waste News #268 may be found in the committee's files.] Senator DORGAN. Thank you very much. Yes, sir.

STATEMENT OF DUANE LEE, WEST FARGO, ND

Mr. LEE. Senator Dorgan, my name is Duane Lee. I am from West Fargo, ND. I work at a company called Red River Manufacturing. And we are a manufacturer of containers that are used by Municipal Services Corp. to transport General Motors Waste. And I want to emphasize how important the strict requirements are that they ask of us in the manufacture of these containers. They have very, very high standards and expect the best.

In addition to the economic development that happens for the Sawyer area, this results in economic development at our company. We have in the past here added 30 additional employees due to the extra work that manufacturing these high quality containers has

done for us.

I just want to speak in support of the transportation of waste, that it is done properly and deposited correctly in environmentally

Senator DORGAN. How large are the containers?

Mr. LEE. They are 20 feet long, 8 feet wide, and 5 feet high.

Senator DORGAN. Thank you, very much.

Mr. LEE. And they are water tight, sealed containers so there is no spillage of the product that they are hauling, whatever it might he.

Senator DORGAN. Thank you, very much.

STATEMENT OF NORMA STUHMILLER, BISMARCK, ND

Ms. STUHMILLER. My name is Norma Stuhmiller, and I have a problem with General Motors sending their waste to North Dakota. Now, General Motors is in the business of making a profit, I assume, and if a landfill can be made safe and if it is economically feasible and if it is economic development, why would they not have a landfill near their plants where they could put to work the people who they lay off when they have to close a plant? [Laughter.] [Applause.]

I am not really a scientist, but I have seen solid granite mountains crack wide open when water freezes. And if this Sawyer landfill is in an area where there is a high-water table, those drums may be as good as man can make them, but it is not just that the content inside of them will freeze. Maybe there is no water inside of them. But the water surrounding them is certainly going to freeze. And if water can crack a solid granite mountain it can certainly crack a little plastic drum.

Senator DORGAN. Thank you, very much.

STATEMENT OF JANE GRUNSETH, VELVA, ND

Ms. GRUNSETH. Senator Dorgan, my name is Jane Grunseth, and I am not here in support of all landfills, I am just here in support of the one that is by Sawyer, which I feel is a very safe one. And I feel that I am not supporting your interstate commerce because I feel that there will be no company that will be willing to put out the money that will be required to make a safe landfill if they know that in 4 years a change of Governor or a change of people will mean a change of laws. And I feel they will have nothing to support them then and they will not be trying to make it as safe as possible.

And I guess I feel that I would like to make a comment on all this water. I wish I had Darlene Rau's original letter when she was applying for a job at MSC because she said her family had mined there and that they knew that there was no water there, and now all of a sudden we are on an aquifer. So, I just wanted to make that comment that she has had a change of attitude, too.

STATEMENT OF BRUCE KAYLOR, GRANVILLE, ND

Mr. KAYLOR. I believe there is one factor that we must not lose sight of, and that is the economics factor. Waste disposal is a business and should be treated as such. I do not believe there is, in a business sense, a difference between shipping wheat or dangerous chemicals such as pesticide, herbicide, fertilizer, from one State to another. Each of the above examples can and will adversely affect the environment. But through local, State, and Federal regulations we have found that they can be handled and used safely.

If we are going to continue to enjoy the new cars, the new homes, and have plenty to eat, we are going to have waste that must be disposed of safely. Waste disposal, by nature, is one business that draws a lot of opposition. If individual States, for political reasons, are allowed to refuse wastes that can be disposed of safely, I wonder which State would be the last to refuse out-of-State waste?

By allowing individual State governments to refuse and accept

waste, what will this total cost be?

Thank you.

Senator DORGAN. Thank you, very much.

STATEMENT OF RENA STALLMAN, MOORETON, ND

Ms. STALLMAN. Senator Dorgan, my name is Rena Stallman from

Mooreton, and wife of Verne Stallman.

I grew up on the Minnesota side of the Red River Vally, and I am going to talk about water for a second. We had a flowing well and it tasted fantastic. I married Verne and moved to the North Dakota side. Our well is 390 feet deep and it tasted like salt brine. We raised cattle and there was two families on the farm.

We tried drilling wells. Verne would say Frankie Fettes, the well driller, "try another spot. Please, try another spot." And I saw the panic in his face as he would be trying to get another well drilled. And as time went on, plumbing and appliances were wearing out in the house with this water coming through. Our water became

rusty. I washed babies in water that looked like orange juice.

Then his brother, Roger Stallman, became involved with the Rural Water Project. He spent hours and hours working with Rural Water to get it established in the area as of December 1978. And since then our water is very, very precious to us. There was one family who had a dairy herd and 11 kids. And he hauled water to his place with a truck that looked like a gas truck to be able to survive for his family.

Water, like I said, is very precious to us. We do not want this

water destroyed.

I thank you, very much.

Senator DORGAN. Thank you, very much.

STATEMENT OF BOB BOLINSKE, BISMARCK, ND

Mr. BOLINSKE. My name is Bob Bolinske. I am an attorney. I live in rural Bismarck, ND. I was involved in measure No. 7, which was the measure which was attempting to detour the out-of-State importation of waste into North Dakota. We found it virtually impossible to do because of the interstate commerce clause as it has been

interpreted.

I think the Supreme Court is wrong, but they are the Supreme Court and there is not a lot we can do about it except to ask you to give us a chance to debate this issue. I think what you see here today is exactly what you will see if a measure like this is passed. You will see the clash of ideas, you will see pro and con and debate. I just—I beg you to give us that opportunity. Let North Dakotans, then, decide their own future.

Right now, I obviously am very much opposed to the importation of any kind of waste into North Dakota. It is a matter of dignity, self esteem, it is a matter of health, it is a matter of preservation

of our land and our air and our water and our quality of life.

I sympathize with the people of Sawyer. I am from a small town. All they are trying to do is preserve their way of life just as the rest of us are trying to preserve ours. I think we can, but we do not need the rest of the Nation dumping their trash in our State.

We have done an excellent job of preserving the quality of our land and our air and our water, and we are going to continue to

do that.

Senator DORGAN. All right, thank you very much. Yes, sir.

STATEMENT OF BILL DEGELE, SAWYER, ND

Mr. Degele. Mr. Dorgan, my name is Bill Degele. I am an employee at MSC. I think I speak for all of my fellow employees that we are all for clean air and clean water and do not want anything to happen to the environment. Working with MSC, I have seen that in the construction part, I was involved in that, that they are doing above what everybody is asking them to do. And they have worked will with the State of North Dakota.

They have probably got the State of North Dakota—I believe, if I am right, that the State of North Dakota had no regulations for waste. And MSC came in and worked with the State of North Dakota to have regulations for all these other landfills in North Dakota. So, I think MSC is a great company to work for, and that is

all I have got to say.

But I speak for most of my fellow employees that we would not have anything happen to the environment, and like you mentioned to Dennis Redding, I would be willing to quit if I saw anything that looked like it was going to hurt North Dakota.

Thank you.

Senator DORGAN. Thank you, very much. Yes, sir.

STATEMENT OF KARMET LOORENCE, SAWYER, ND

Mr. LOORENCE. Honorable Dorgan, I am Karmet Loorence from Sawyer, and I am also a member of the Sawyer City Council.

If this law is passed to prohibit waste from crossing State lines, it is surely going to have an economic growth impact on a State like ours. We are loosing people every day who have to go outside

of our State to find work. We have a State that has thousands of acres of land suitable to bury waste in. So, why not use this land? We like to get the finished product, but we do not want to take any of the residue or the waste that it takes to make the finished product. To me, that says selfish thinking.

MSC has a state-of-the-art facility to handle waste, and if you have toured the facility you will see for yourself it is a state-of-the-art facility. I believe our Washington delegation should have better

things to do than to get involved in a State waste problem.

I also feel we should be looking at many other things that would do us more good than interfering with this waste coming into our State. All this will do is drive out industry from coming in here. We need economic growth and to get tax dollars rolling so we can keep this State from becoming a State of the boondocks. So, let us vote no on this bill.

Thank you.

Senator DORGAN. Let me, just for clarification, indicate the legislation does not prohibit the importation of waste from out of State. It simply would allow the States to be empowered to make its own judgment on it. I just want to clarify what the legislation is.

Yes, Ma'am.

STATEMENT OF BARB MELROE, GWINNER, ND

Ms. Melroe. Good afternoon. My name is Barb Melroe and I am

from Gwinner, ND.

Two short points: You mentioned earlier how they disposed of waste in Regent, and we chuckled, the whole place chuckled. Twenty, 30 years from now are they going to chuckle when they see how we are disposing of it now?

Senator DORGAN. But everybody came from towns that did ex-

actly what I described was done in region.

Ms. Melroe. Exactly.

Senator DORGAN. I mean, that is the reason we all chuckled. We all remembered exactly what we did with our waste 30 years ago.

Ms. MELROE. And will they chuckle 20 or 30 years from now when they see how we are disposing of waste, and say, "Boy, they

thought this was great back then." How ridiculous?

And then I also want to say my husband and I raise cattle. We cannot sell cattle to certain States if they have not been calf-hood vaccinated. Is that interfering with our interstate commerce? I do not think so. It is keeping safe cattle herds. Well, I love my cows, but I love my kids a lot more.

Senator DORGAN. Thank you very much.

We are going to hear from these four people who are now standing and then close the hearing.

Yes, sir.

STATEMENT OF JOEL HEITKAMP, MANTADOR, ND

Mr. Heitkamp. Senator Dorgan, I am Joel Heitkamp, General Manager of Richland Rural Water Users, a nonprofit membershipowned organization that serves Richland and Sargent Counties of southeast North Dakota. I would like to thank you and your committee for holding this hearing in North Dakota.

Our concern, obviously, is the groundwater contamination. The Gwinner channel of the underground aquifer flows to the Milner aquifer which then flows to us in southeast Richland County, which is where our source of water is. A major investment has been made by the Government through Farmer's Home Administration providing the rural and small town citizens with safe, potable water-1,100 farms and homes and six cities receive their water from this

Why would we put that \$11 million investment in jeopardy so that out-of-State interests are served? We need garbage taken off of interstate commerce.

Thank you.

Senator DORGAN. Thank you, very much.

STATEMENT OF KAREN SCOTT, BISMARCK, ND

Ms. Scott. My name is Karen Scott. I am a member of DRC, and on behalf of DRC we strongly support Senate Bill 439. And in order to keep this short, I am just going to say North Dakota does not need to be the garbage mecca of the United States. And another definition for state of the art is you are a guinea pig.

[The prepared statement of Ms. Scott follows:

PREPARED STATEMENT OF KAREN SCOTT

Senator Dorgan, members of the Committee, I would like to thank you for the opportunity to testify today. I am testifying on behalf of the Dakota Resource Council. The Dakota Resource Council supports in the strongest terms Senate Bill 439, cosponsored by Senator Dorgan, which would give states the Right To Say No to Out of State Waste. We believe this bill is vital to establishing a rational waste management policy for North Dakota as well as the nation.

For many years now, communities in North Dakota have been confronted by proposals for hazardous waste disposal facilities, medical waste incinerators, and landfills for incinerator ash, medical waste, incinerator ash, and municipal garbage. Why, with a low population, few polluting industries, and hundreds of miles from potential customers, has North Dakota been targeted as a garbage Mecca?

The answer can be found in the Cerrell report, commissioned by the state of California in 1984. The Cerrell report lists the attributes of communities least likely to oppose some sort of waste facility in there community. According to the report, waste dumpers should seek out economically distressed rural communities in the south or midwest, whose residents are low income, republican, older politically conservative, Catholic, uninvolved in community affairs, and have lived in the community for 20 years or more. This is a good picture of many North Dakota community for 20 years.

The companies that prey on North Dakota's economic distress like to tell us that it is our patriotic duty as good Americans to accept waste from anyone who wants to dump on us. After all, North Dakota's waste has to go somewhere else doesn't it? The dumpers want us to ignore the strides North Dakota has taken to get a handle on our own waste generation. After all, if every state produced as little waste as North Dakota, most of the dumpers would be out of business. In the latest toxic release inventory produced by EPA, North Dakota was 48th out of fifty states in the amount of hazardous waste we release into the environment North Dakota has

the lowest per capita hazardous waste production in the nation.

North Dakota has passed several groundbreaking laws to get our own waste under control. The Dakota Resource Council is proud to have initiated much of this legislation. Every community in North Dakota will soon be within one hundred miles of an EPA approved landfill and will have to take its municipal waste there. To ensure that these landfills are properly run, the 1993 legislature passed a law prohibiting waste companies that routinely break environmental laws in other states a permit to operate in North Dakota. This is a first step towards ensuring

that environmental criminals will not be allowed into the state.

When Municipal Services Corporation descended on Sawyer, DRC supported a moratorium on incinerator ash disposal in the state in order to develop sensible regulations. That process will soon come to a close, and we hope the regulations will take the sensible position that waste containing hazardous levels of toxic materials

is toxic waste, no matter what label is put on it.

Another groundbreaking law supported by DRC was North Dakota's corporate responsibility law. Too often, corporations, instead of protecting investors from financial liability, are used as part a shell game to shield corporate criminals from punishment. The corporate responsibility law would strip corporate criminals of their ability to escape punishment by setting up a dummy corporate subsidiary to do its highly profitable dirty work for them. Federal legislation similar to North Dakota's Bad Actor and Corporate Responsibility laws have been introduced. DRC supports these efforts to "take a bite out of environmental crime" and asks the members of the committee to consider co-sponsoring this legislation.

But all of North Dakota's efforts to responsibly manage its own waste could come to naught. Other states must also take responsibility for handling their own wastes. Without this bill, urban states will continue to look at North Dakota and other rural states as a convenient toilet to flush their waste down. If we enable other states to continue to dump on us, then there will be no reason for those states to make

the hard decisions about what communities will become "trashed."

Despite the dumper's proclamations of doom, this bill would bring order to the waste industry, not chaos. As waste disposal is handled nearer to the source, the impacts become plain to the people generating the waste. If waste is hidden in North Dakota or Kentucky, there is no need for the people of New York or Chicago to face their own wasteful habits. DRC asks this committee to allow states to emphatically say NO to out of state wastes.

Waste is not inevitable. Waste is just that, a sign of inefficiency, lazy planning,

and poor design. Computer companies are finding out that soap and water cleans up circuit boards as well as expensive, toxic, solvents. Manufacturers are finding that consumers will buy merchandise even if it isn't wrapped in countless layers of plastic, paper, and metal. And we will find that even more easier, cheaper, alternatives will be discovered as we make stupidity and laziness too expensive.

Senator DORGAN. Yes, Ma'am.

STATEMENT OF AMY BEUCHLER, SAWYER, ND

Ms. BEUCHLER. Hi. My name is Amy Beuchler, and I am from

rural Sawyer, ND.

Nothing gets changed in the past 2 years. Echo Mountain is still located on top of the only aquifer in Ward County. Because of the objections of CCCW, MSC has built a cell which does have some safety features. But it seems nothing is disposed of in the cell. Its purpose seems to be to impress the people who tour the Echo Mountain facility.

Agriculture is North Dakota's largest industry. Bringing in hazardous waste will jeopardize that industry. Food chains will not buy products tainted with ingredients from the waste. Now, we are trying to promote the tourist industry. Will people want to tour our State when it is full of hazardous waste dumps and garbage incinerators? I think not. I know I would stay as far away as possible.

I have always been proud of North Dakota, and would like to continue to live here and enjoy our clean air and water. But we are losing those precious commodities because we are letting other States take advantage of us. As a citizen of North Dakota, let us keep this State a place to be proud of and a healthy place to live.

Thank you, very much.

Senator DORGAN. Thank you very much.

Ma'am?

STATEMENT OF DARLENE MEDLAR, DICKENSON, ND

Ms. MIDLAR. I am Darlene Midlar. I am a long-time member of Dakota Resource Council, and I kind of have a question statement.

It has been stated that the decision of whether or not to accept out-of-State waste should be made by professionals. And as I understand the act, the decision then would be made by the States' Governors? Is that what I am understanding, as to whether or not to accept out-of-State waste?

Senator DORGAN. Yes. The people of the State, through its Gov-

ernor, would be able to make a judgment.

Ms. MIDLAR. And then my statement is I would assume those people to be professionals, so I would be comfortable with their decision as professionals, to know whether or not to accept waste from out of State.

Senator DORGAN. All right. Thank you, very much.

I believe Dave Olson had a statement, and we will accept that unless Dave feels strongly, we will accept that as a part of the record.

A VOICE FROM THE AUDIENCE. I think he just left his statement.

He made a copy, I think.

Senator DORGAN. All right. Thank you very much.

I was told by someone that you could not hold a hearing of this type without it being a shouting match, and that is not the case. North Dakotans, while disagreeing very strongly on issues, are thoughtful and courteous and interesting, and that has been the

case today.

If we refer to a search for facts in mining terms we probably have only been surface mining here. I understand that. This is an enormously complicated issue. I do not understand as much as most of us want to understand about lead and cadmium and trace metals and contamination and hazardous materials and the things that affect our lives that we rely often on the scientists and the engineers and the experts to guide us on.

But I do generally feel that in issues like this we need to search for as much information as is possible to inform all of us as best we can so that we can make as a people the best-informed judg-

ments that are possible for us now and for the future.

And I appreciate very much the courtesy that you have all exhibited. This record will remain open for 2 weeks, and if you wish to submit for the record, which will be published for this committee, I would encourage all of you to do that, submitted directly to the Senate Commerce Committee or to my office and we will submit it for you.

With that, I thank all of you for your participation, and this

hearing is now over.

[Whereupon, at 11:55 a.m., the hearing was adjourned.]

APPENDIX

PREPARED STATEMENT OF GEORGE GILLIHAN, REGIONAL VICE PRESIDENT, LANDFILL OPERATIONS, USA WASTE SERVICES, INC.

I have received an invitation to testify, on behalf of USA Waste Services, Inc., at a field hearing of the Senate Committee on Commerce, Science, and Transportation, regarding the interstate transportation of solid waste. I understand this hearing is to be held on Thursday, June 3, 1993, in Bismarck, North Dakota. Unfortunately, due to the short notice involved, previous commitments present a schedule conflict

and I must, therefore, respectfully decline your invitation. I would, however, like to provide some comments regarding this issue for your consideration.

As you are aware, USA Waste Services, Inc., owns and operates the Dakota Landfill, located near Gwinner, North Dakota. This facility has for some time accepted nonhazardous solid waste from the local waste shed as well as a number of communication. nities in Minnesota. The site is geologically and hydrogeologically well suited for landfilling and is currently being upgraded to subtitle D standards. It is our desire and intent to construct and operate this facility consistent with state of the art technology and sound environmental and aesthetic practice, as a responsible member of the community and a good neighbor to the residents of the area. In this regard, we have shared openly with the Whitestone Hill Township Board of Supervisors and the City of Gwinner our current operations and future development plans for the facility. We have successfully negotiated term's for host community agreements with both the City and the Township. A Township employee is on site during operating hours as a full time monitor and is provided a vehicle and office space to perform this function.

We have committed to the Whitestone Hill Board of Supervisors that we will keep them informed and fully aware of the origin and nature of all waste streams disposed at the facility, and that all incoming waste will be handled in accordance with all applicable State and Federal laws and regulations. With regard to the disposal of out of state wastes, we have clearly stated our intent to continue to accept current waste streams from contiguous states, particularly Minnesota, as has historically been the case at this site. In addition, we would seek to contract for additional waste streams from the same general market areas. These are purely economic business decisions for USA Waste Services, Inc. to allow us the opportunity for a fair return on our investment in the Dakota Landfill.

In an ideal world, perhaps, our company and our industry would seek to limit waste streams to local waste sheds, and local governments would not hesitate to make politically distasteful but necessary siting decisions for landfills. The reality, however, is typically much different. subtitle D standards for municipal solid waste facilities envision fewer and larger landfills serving regional areas, at a much higher cost of operations resulting from increased and expanded safeguards to the community and the environment. We thoroughly endorse the goals and objectives of this legislation, which should result in the closure of substandard facilities and improve those which continue to operate. It must be recognized, however, that disposal costs have and will continue to increase in order to provide for the proper operation, closure, and post-closure monitoring and maintenance of landfills. As with any business, these costs ultimately will be borne by the consumer, or user of the service provided.

In the case of the Dakota Landfill, we have an existing facility which is in an environmentally excellent setting to function as a nonhazardous solid waste disposal facility, wherein the opportunity for expansion exists, as does a continuing need for disposal services. Additional waste streams are available, some of which originate within the state but outside the local waste shed, and others which are from outside the state. Typical household waste generated in Minnesota, or Bismarck, is indistinguishable from that generated in Gwinner. Disposing of such waste at the Dakota Landfill presents no added threat to the environment. It does, however, offer local residents the opportunity to keep their cost to transport and dispose of their waste

much lower than it would otherwise be. We believe this to be a significant economic benefit which will increase substantially in magnitude over the next several years relative to those communities who do not have a nearby available disposal facility.

As a member of the National Solid Wastes Management Association (NSWMA), USA Waste Services, Inc. endorses the position of the NSWMA regarding the issue of interstate transportation of solid waste. For this reason I have asked NSWMA to provide, under separate cover, copies of their comments on this issue for your consideration. Again, I apologize for being unable to accept your invitation to testify before the Senate Committee on Commerce, Science, and Transportation, but I do appreciate the opportunity to express our views on this matter. If I can be of further assistance, please do not hesitate to contact me.

PRESS RELEASE—MUNICIPAL SERVICES EMPLOYEES REMIND SENATOR DORGAN THEIR JOBS ARE LINKED TO SHIPMENT OF WASTES INTERSTATE

BISMARCK—Employees of Municipal Services Corporation (MSC) sent a loud and clear message to U.S. Senator Byron Dorgan today, reminding him that their jobs depend on the continued ability to ship industrial wastes interstate. Dorgan is holding hearings here on the subject of interstate shipment and the U.S. Senate Commerce Committee on which he serves may consider legislation later this year that could cost North Dakotans their jobs.

"We all want a safe and clean North Dakota for future generations and we applaud Senator Dorgan's concern about this important issue. but we need jobs too and we just want to remind the Senator that any legislation he proposes or supports should not cost us our livelihoods," stated Bob Knudson, general manager of MSC's

Echo Mountain Facility.

The MSC employees said that the thirst and foremost standard for any waste disposal operation is safety. "We are proud to have worked with local government and state officials to develop the most stringent regulations for industrial waste in the country. Not only are the regulations the most stringent- our operations are monitored by a full time state inspector. The safety of our operation can not be questioned, with safety assured we can turn to the significant job benefits Echo Mountain brings to the state and local community," Knudson continued.

The MSC employees all travel led in a caravan today from the Sawyer community

to Bismarck for the United States Senate Field Hearing.
"We think it is important for our neighbors, family and friends in North Dakota to realize that the operational decisions, and therefore all aspects of health and safety, are in the hands of the employees of the facility. Just about every employee is a native North Dakotan, raising a family and earning a living right here. That's a powerful incentive to do things the right way. I can also say that the commitment of MSC and USPCI to build the most technically advanced facility of its kinds has been solid and consistent," Knudson said.

MSC currently employs 34 people with an annual payroll of \$1.1 million. MSC further plans to hire a dozen more people in the next year. The company has invested over \$19 million in constructing the facility and bringing it to its present operating status. MSC is currently awaiting a permit decision from the state that would allow the company to manage ash from municipal solid waste incinerators. That decision is expected in August and it could produce additional job benefits for the state. In addition, purchases and other MSC expenditures put \$3.5 million in the past year alone into the North Dakota economy through purchases from dozens of vendors.

The MSC employees are concerned, however, that if Congress passes legislation that bars interstate shipment of wastes or makes it so costly to do S0f they might lose their jobs. Today they urged Senator Dorgan to go slow on making any changes

and not to move in any direction that will take away their livelihoods.

"There is a lot of emotionalism surrounding this issue. We think the real issue is safety and that can be measured by the people who run the facility, the state and federal regulations and the quality of the facility. North Dakota, and really every other state, is dependent on out-of-state facilities for disposing of some of the waste generated. Legal and regulatory considerations contribute to making it impractical to fully eliminate interstate transportation of waste for disposal," Knudson said.

Knudson stressed, that because of aggressive action by the North Dakota Department of Health, the state has the most stringent industrial waste disposal laws in America. Very few companies he said will even attempt to develop here in North Dakota because of the great initial capital necessary to comply with these very strict

laws he said.

MUNICIPAL SERVICES CORPORATION, ECHO MOUNTAIN FACILITY, SAWYER, NORTH DAKOTA COMMUNITY RELATIONS

Waste management is an issue that is affected by every individual and every household. Technology, legislation and community Involvement regarding waste management is undergoing rapid change and is affecting every community. Municipal Services Corporation (MSC) is committed to working with and involving local

communities in the many facets of the Echo Mountain Facility.

MSC's community relations effort is a critical piece of our overall operation. Our involvement provides continuing interaction with the community through active listening and responding to questions, educating the public about our facility and its operations as well as our #1 commitment to protecting human health and the environment while providing responsible waste management.

MSC's role in the community includes:

Educating local citizens and governments about the facility and its operations

Serving as a liaison between townships, city governments and MSC

 Working with business and community leaders ensuring that the facility's economic benefits to the community are maximized

Implementing MSC's Good Neighbor Trust Funds for the benefit of local com-

We have found the first-hand, educational experience of a guided tour an important element in facilitating education and appreciation of a complex, often misunderstood, but necessary industry.

MSC's educational mission includes working closely with:

Elementary school superintendents

College presidents, vice.presidents, deans and students

Science teachers, science clubs and ecology classes

Resident Doctors and nursing students

Area communities, residents, Sr. citizens
Coordination and facilitation of environmental education programs for schools Public interest and participation is demonstrated daily by the groups and individuals who tour our Echo Mountain Facility. MSC provides educational tours in excess of 50 individuals per month and entertained over 700 individuals at our open house in July 1992. Each person touring Echo Mountain completes an evaluation of the Echo Mountain educational experience and many views change from negative to neutral to positive after viewing our operation and having the opportunity to ask questions to learn more about the industry of waste management.

We maintain an open door policy inviting the public to tour our Echo Mountain Facility and are available to give educational presentations if a tour is not a viable

option.

As residents of North Dakota as well as congressional leaders who create public policy it is important that each of you experience MSC's commitment to environmental integrity by taking a tour of the Echo Mountain Facility.

Prepared Statement of Allen Moore, President, National Solid Wastes MANAGEMENT ASSOCIATION

Mr. Chairman, my name is Allen Moore. 1 am president of the National solid Wastes Management Association (NSWMA), a trade group representing more than 2,500 private waste service companies in the U.S. and Canada. Our members include transporters of solid and hazardous waste, operators of solid and hazardous waste treatment and disposal facilities, waste recyclers, manufacturers and distributors of waste management equipment, and firms providing legal, financial, and con-

sulting services to the waste management industry.

NSWMA is deeply concerned about any proposals to authorize states to impose bans on the importation of municipal solid waste (MSW) or hazardous waste whether such bans would be imposed directly or indirectly, through discriminatory, prohibitively high fees that would have the same effect. We are concerned because imposition of a ban would disrupt historical, logical, and desirable arrangements for the management of the nation's wastes at a time of rapidly declining disposal capacity. Bans in whatever form present both environmental and economic risks—and bans on the import or export of municipal solid waste would be particularly difficult for smaller and poorer communities. We do not believe that waste bans, by themselves, would serve any useful countervailing purpose to offset their adverse effects.

To understand why this is so, it is necessary to understand the reasons for, and desirability of, historical patterns of solid waste transport and disposal. We should not allow anger about the export of massive quantities of municipal solid waste from New York and New Jersey, or the perception that certain states receive disproportionate volumes of hazardous waste exports, to stampede us into policies that are

contrary to this nation's long-term interests.

It is also important to understand the differences among the various categories of waste and the particular environmental, regulatory, and economic factors that affect treatment and disposal practices for each of these categories. As an example, increasingly stringent hazardous waste "Land Disposal Restrictions" require that tough treatment requirements be met before hazardous waste or waste treatment residues can be disposed in special hazardous waste land disposal units. Specific treatment standards have been developed for hundreds of different hazardous constituents and these standards often require the use of a particular treatment technology or a series of treatment technologies. Since most states and even most multistate regions may generate relatively low volumes of specific hazardous wastes, environmental and economic considerations have created a system of nationwide interdependence involving specialized waste treatment facilities. Consequently, interstate movement of hazardous wastes is a necessary response to cost-effective and environmentally-protective waste handling requirements.

The category of industrial non-hazardous waste is similarly broad, including some wastes which are reasonably innocuous and others that the U.S. Environmental Protection Agency (EPA) is still studying to determine whether or not full "hazardous" waste protections are required, some generators of industrial non-hazardous waste—motivated by environmental concern or by a desire to avoid future site cleanup liability—voluntarily send their industrial non-hazardous wastes to fully-permitted hazardous waste facilities. These industries elect to pay a premium for hazardous waste treatment and disposal to insure that their wastes do not create problems. As in the case of hazardous waste, interstate transportation to specialized facilities represents the economically and environmentally preferable alternative for

significant volumes of non-hazardous industrial waste.

Biomedical waste, sewage sludge, ash from municipal waste combustors, and recyclables destined for reuse or remanufacturing all raise other, different considerations for environmentally sound and cost-effective management. But, while the specific reasons for interstate transport of wastes may vary somewhat from one waste category to the next, we believe that there are convincing arguments for interstate

waste movement in all waste categories.

NSWMA knows that you and the other sponsors of S. 976, the Resource Conservation and Recovery Act Amendments of 1991, recognize these complexities, and we strongly support your decision not to extend the bill's interstate transport provisions to hazardous waste. NSWMA has exhaustively analyzed state Capacity Assurance Plan data to determine the volume and patterns of hazardous waste movement between individual states. Our analysis strongly reaffirms Senator Chafee's introductory statement in support of S. 976 which noted that RCRA's land disposal restriction standards require access to numerous specialized hazardous waste treatment technologies, and that few—if any—individual states produce sufficient quantities of particular hazardous wastes to support the full range of required treatment facilities.

As summarized in Appendix A, we conclude that interdependence between states is an absolute necessity for environmentally sound and cost-effective management of hazardous waste. I hope the information we have gathered will be useful to S. 976 sponsors in helping their colleagues recognize the special considerations applicable to hazardous waste treatment and disposal.

In the following pages I will discuss the impact of transportation bans on the management of traditional MSW (residential, institutional, and commercial waste), and comment specifically on the provisions of your bill as they affect this waste

stream.

BACKGROUND ON MUNICIPAL SOLID WASTE

The private collection and disposal of municipal refuse is a business providing a vital public service. Unfortunately, there are many who think that it is a simple and essentially unplanned activity. Indeed, while this view may be widely held, nothing is further from the truth. A refuse driver does not merely pick up garbage until his truck is filled and then discuss with his crew where the trash should ultimately be transported for disposal. In fact, setting up a waste services program involves extensive and detailed planning.

Setting up a municipal waste collection system involves a thorough analysis of collection needs. Personnel and equipment are matched to the specific population, geography, and waste-generating characteristics in the area. Routing alternatives, as well as the types and frequency of collection service, are planned based upon street layout, population centers, and local requirements. Managing operating expenses,

such as fuel, equipment maintenance, compliance with environmental laws and regulations, wages and insurance and other budget items, obviously will be affected by the distances and times the trucks must spend on the road going to a disposal

site.

Generally, it was believed to be to everyone's advantage that the place of disposal be close to the points of waste generation. And, until the past decade or so, the collection/disposal system largely operated around this principle. However, disposal sites began moving further and further from collection points as existing sites were closed and not replaced because of environmental regulations, zoning restrictions, and political and economic considerations

There are two principal reasons that MSW moves in interstate commerce from the

state in which it is generated to another state for disposal.

The first reason is that it makes good sense now and has made good sense throughout the history of this nation from an economic, social, and environmental standpoint. Natural "wastesheds" have developed over time and are continuing to evolve for both environmental and economic reasons. These wastesheds reflect a cooperative and collective strategy for people in a region to solve their common prob-lem—how to dispose of their wastes in the most efficient, safe, environmentally protective, and cost-effective manner. The answer in many cases has been to send MSW from one state to a landfill or waste-to-energy site in another state. This often involves an interstate shipment of only a few miles between contiguous states.

The second reason for interstate movement of waste is that adequate disposal capacity is either not available or not affordable in the generating state because that state has failed to make the hard decisions necessary to develop such capacity. This second reason is distinguished from the first by the fact that it is primarily political, although economic, geologic, or environmental considerations may also be involved. Generating states in this second case may have environmentally suitable sites, but they don't use them because of land costs, NIMBYism (the Not-In-My-Backyard syndrome), or other reasons. The political and economic costs of disposal in the generating state become so high that it is "less expensive" to transport the MSW to other states for disposal.

Is the interstate movement of MSW bad?

No, not inherently so. In fact, it has been, and continues to be, essential and beneficial to both generating and receiving states. The generating community is able to dispose of its MSW safely and economically instead of being pressured into keeping open an environmentally unsafe facility. Without the opportunity to send its waste to a facility in another area, a community which does not have the resources to develop new management options or upgrade existing ones may be delayed or prevented from closing a poorly-run "home" site.

A host community can also gain from a safe and environmentally-protective facility. Its own MSW will be managed safely at low or no cost, while the old, and otherwise unsafe, facility is closed. The host community's tax base is broadened. It is increasingly common for host communities to play a major role in planning and designing state-of-the-art facilities, as well as receiving "host fees" based on the volumes of waste received. More and more of these public-private partnerships are

being developed.

Finally, the costs of state-of-the-art facilities that will be mandated by the subtitle D regulations of the Resource Conservation and Recovery Act and by the Clean Air Act can oftentimes only be sustained by revenues derived from within and outside

the state.

We recognize, however, that there are cases when interstate movement of MSW is a problem. We believe those cases usually result from the failure of exporting states to develop adequate disposal capacity, thus threatening to use up the disposal capacity of receiving states. There is a solution to such behavior, but it is not a ban on interstate movements of MSW. Rather, the solution is for those and other states to site capacity to meet their fair share of waste disposal needs.

Interstate movement of waste can also be a problem when the receiving states do not enact or do not enforce appropriate environmental standards for waste management facilities. Substandard facilities compete unfairly in the marketplace, are bad citizens in host communities, and create potential liability for generating communities as well. The solution to substandard facilities is minimum federal standards vigorously enforced by responsible state agencies, not interference with interstate movements of MSW.

What do the data show?

Good, reliable, and complete data on interstate movement of MSW are not collected or analyzed. As a result, we have been able to gather only what we believe is an illustrative sample of what is really going on. The information we have gathered is set forth in a series of charts and maps that is appended to this statement. Even the limited data that are available, however, confirm that extensive interstate movements form an intricate web of transactions that represent complex and valuable relationships between the people of the various states. This should be no surprise. It is just another manifestation of why the Commerce Clause of our Constitution has been considered so critically important to the success of our economic and

political system. Before summarizing the data, let me explain what we did to gather it. The EPA had no information on interstate movements of NSW. We therefore contacted state officials and reviewed published reports. Most of those contacted did not collect such information, and most of those with data could provide only limited information and tentative estimates. I say this not as a criticism, but to suggest two things: (1) the information is not complete; and (2) the interstate movement of MSW has not been seen as an acute problem warranting the attention, time, or resources of waste management professionals in most states. To supplement this information, we contacted our members who own or operate some of the disposal sites throughout the nation.

We began to collect interstate transport data in the summer of 1990. In July, we published preliminary findings on the number of transactions that occurred between states in 1989. In October, we published a more complete snapshot of transactions that occurred among the 48 contiguous states during 1989 and 1990. Recognizing that people were also interested in knowing how much MSW was moving in interstate commerce, we have reexamined our data for the base year 1989-1990 and added new data when it could be found. The results of these efforts are the follow-

• We identified 133 different and regular interactions between states. Each interaction reflects the fact that MSW moves between 2 states, as an import or an ex-

port; · 43 states plus the District of Columbia exported some portion of their MSW for disposal;

42 states imported some MSW for disposal;

1 state (Montana) had no known interstate activity;

· We estimate that about 15 million tons of MSW was moved in interstate commerce during 1989 and 1990. This is 8 percent of the 180 million tons that EPA estimates is generated each year;
• 16 states plus the District of Columbia exported more than 100,000 tons;

27 states exported less than 100,000 tons; and,

5 states had no known export activity.

Let The remind the subcommittee that our data included onlythose transactions involving traditional municipal solid waste—i.e., waste from residences, institutions, and commercial businesses. Before specific conclusions can be drawn about the impacts of bans on the transport of other specialized wastes, further studies would need to be undertaken. We suspect, however, that the impacts would not be markedly different.

A ban would be counterproductive

Large, new state-of-the-art landfills and waste-to-energy facilities are expensive. Increasingly, they rely on revenues derived from volumes of MSW coming for disposal from regional wastesheds. we believe that the funds necessary for planning, design, engineering, and construction of the desperately needed new capacity they offer will simply not be committed if there is a risk that the flow of waste to the site will be cut-off and projected revenues will decline sharply. Neither private nor public investors should assume that risk.

Existing facilities that were built in reliance on revenue from out-of-state MSW would also be affected by a ban. They could be forced to cease operations if the lost revenue could not be recovered through higher rates for in-state waste so as to meet

the costs of debt service and operations.

In the absence of sufficient volume to sustain an efficient, large facility, smaller facilities would likely need to be built to meet a state's disposal needs. Thus, ironically, the imposition of a ban, or even the risk that a ban might be imposed, could lead to the need to site more, rather than fewer, facilities at more locations. There is no reason for confidence that NINBYism will not continue to frustrate the siting of those additional facilities.

The development of new, safe, environmentally protective disposal capacity would be hampered by a ban, and the former importer could be forced to keep open less

environmentally protective facilities to dispose of its own MSW.

The nation needs capacity

Since the country is not knee-deep in garbage from border-to-border and coast-to-coast, the characterization of our problem as a national solid waste "crisis" seems inappropriate. But Americans are generating more and more trash with less and less space to dispose of it and without sufficient alternatives in place to make up the difference. The result is local problems with national implications. Volume reduction methods are vital to our nation's waste management strategy and should be actively encouraged. Yet reduction does not entirely obviate the need for disposal. Some quantity of garbage has to be disposed. To bring our disposal needs roughly into balance with the supply of existing disposal capacity, we will need to exceed EPA's national source reduction and recycling goals. We can burn more in energy recovery and incineration facilities; we can construct new landfills; or, we can utilize a combination of these options.

It is not difficult to understand why state and local officials are tempted to impose import bans. The national picture is grim. If old landfills close and new ones open at today's rates, and if current recycling and resource recovery levels continue, our disposal requirements will exceed existing capacity before the end of this decade. Consequently, as disposal capacity around the country dwindles, disposal sites have taken on the status of scarce economic resources. They are vital to the continued orderly growth and development of any individual community which has one. There is a natural tendency to want to preserve that resource for the community, the country or the state in which it is located, and to prevent its capacity from being diminished or even exhausted by those from outside a certain geographic boundary.

Ideally, every state should have the capacity to treat and dispose of most, if not all, of its own MSW. But once it has that capacity, it should not be required to use it to dispose of only its waste, as long as there is assurance that its MSW will be managed responsibly. In this sense, every state should have the capacity to do its

"fair share."

The grant of authority to impose a ban on out-of-state waste holds no promise, by itself, that the importing or exporting state will, in fact, develop the capacity to manage its own MSW. If that is the goal, as we believe it must be, then states must be required to site and permit sufficient disposal capacity within the immediate future unless legitimate environmental considerations would dictate otherwise. If exporting states fail to do so, and continue to be excessive net exporters of MSW, they should be sanctioned. To be effective and fair, however, the authority to sanction would have to be dependent on the importing state having capacity and the exporting state failing to meet specified requirements.

Differential fees can have the effect of bans

Finally, Mr. Chairman, I would like to comment briefly on one related matter. Differential fees for out-of-state waste are typically used to discriminate against out-of-state waste, rather than to reflect any legitimate difference such as the planning, administrative, and enforcement costs of a state's program that are not borne through taxes by out-of-state generators. They are usually thinly veiled bans that are objectionable for the same reasons.

INTERSTATE TRANSPORT PROVISIONS OF S. 976

For the reasons outlined above, NSWMA believes that any restrictions on the interstate movement of MSW are unnecessary and potentially damaging to parts of the nation's economy and environment. At the same time, we recognize that Congress is under pressure from some quarters to step in to this emotionally-charged situation. We appreciate the thoughtful and comprehensive approach which you and your co-sponsors have taken in this legislation, even while we disagree with some of the specific proposals.

Should the authority to ban be linked to prior conditions?

If Congress finds compelling and public interest reasons to allow states to ban the importation of MSW for incineration or disposal, we strongly urge you to establish specific and narrow conditions under which such interdiction may be applied. For such an extraordinary departure from Commerce Clause intent, the dual conditionality which you propose in section 4013(b) should be viewed as a minimum requirement. EPA should be required to define the criteria for a state solid waste management plan; any state desiring to ban imports should have an approved plan and be in compliance with it; only a state which does not have an approved plan or is not in compliance with it should be subject to a ban imposed against it.

NSWMA suggests you might go even further to establish Congressional intent. For example, should a state that meets the criteria defined above be allowed to ban imports simply because it wants to, or should it be required to show some actual

harm from the imports? To allow a state to ban imports for the purely political value of the action seems to trivialize the original intent of the Commerce Clause.

To put the issue another way, what is the behavior that Congress hopes to change

To put the issue another way, what is the behavior that Congress hopes to change with this legislation—the failure of a few states to provide for their fair share of disposal capacity, or the reliance by a few states on long-distance disposal, or the failure of a few states to regulate the substandard facilities that provide a magnet for some wastes? We believe that answers to these questions might suggest a solution more surgically tailored to the problem that stops well short of abandoning the intent of the Commerce Clause.

S. 976 provides that, at the end of five or eight years after enactment, the Governor of a state may ban imports merely by withholding his consent to them. This provision makes a mockery of the comprehensive state planning process prescribed in other parts of the legislation. I strongly urge you to delete section 4013(e) because it overrides the prior conditions so essential to an orderly process of waste manage-

ment.

The right to charge fees must be earned

States presently have the right to levy fees on out-of-state wastes commensurate with the cost of managing those wastes in the importing state. If Congress intends to reward states for accepting MSW from other states by allowing the importers to charge more than their costs, then that right must be earned. At a minimum, the importing state must have an approved solid waste management plan and be in compliance with it; only an exporting state which does not have a plan or is not in compliance with it should be subject to fees levied against its wastes. We believe

language to this effect should be added to any provision authorizing fees.

Furthermore, to avoid chaos in the national system of waste management, the right to levy a fee on out-of-state wastes should not become effective immediately upon enactment. Without prior constraints, every importing state could be expected to charge an additional fee—the legislation assumes a minimum fee of \$4 per ton—creating serious disruptions in some markets, particularly in the Midwest and southwest. As an example, an additional \$4 per ton fee on waste exported from New York or New Jersey, added to current charges of over \$100 per ton, would amount to less than a 4 percent increase. However, that same fee, charged against a ton of waste moving between states where per ton charges are often less than \$30 a ton, may constitute an increase of 13 percent-20 percent and do serious damage to the budget of a small community that is not the target of this bill. We strongly urge you to drop the automatic authority granted in sections 4013(a) (1) and (2).

Fees must not become de facto bans

If Congress intends to create a reward system for states that accept waste from other states, then the approach you have proposed of allowing a surcharge on a base state fee is probably the correct one. However, the fee schedule you have authorized is punitively high and could be expected to spiral even higher in succeeding years. The net effect of these provisions would be massive market disruptions as I suggested earlier, or de facto waste bans, or both.

Alternatively, if your intent is to discourage exports of MSW from the Northeast where the price of disposal is relatively higher than in most other parts of the country, your action may have the unintended consequence of driving up the cost of solid waste disposal nationally without adding any incremental environmental protection.

waste disposal nationally without adding any incremental environmental protection. Although we do not reject outright the concept of a reasonable fee on waste originating outside a "wasteshed," it will be difficult, if not impossible, to define satisfactorily what constitutes a wasteshed in current and future contexts. The contiguous versus non-contiguous approach contained in the committee bill has the appeal of simplicity, but it ought to be understood to be an imperfect description of even the past character and workings of wastesheds. In light of recent and continuing evolution of the waste industry (e.g., environmental and economic considerations are spurring development of more and larger regional facilities), this approach would promote neither greater protection of the environment nor greater economic efficiency.

We know that wastesheds are likely to encompass larger areas than those which have in the past been synonymous with metropolitan statistical areas. Even more important to the task of fashioning a constructive definition, however, we know that

wasteshed boundaries are not static.

For these reasons, we do not believe the distinction between contiguous and noncontiguous states is an adequate basis for distinguishing between regional wastesheds and long-haul. Nevertheless, we appreciate the committee's interest in this issue, and we would welcome the opportunity to continue working with you to find a workable approach.

CONCLUSION

Mr. Chairman, you and your co-sponsors are to be commended for the thoughtful and comprehensive proposal you have crafted to address the nation's solid waste from generation through disposal. My comments today are limited to those provisions of S. 976 governing interstate transport. I recognize that the interstate movement of waste is a difficult and politically-charged issue. While I have disagreed with some of the requirements you have proposed, I applaud the leadership you have shown in creating a responsible vehicle for the debate. In the next several weeks and months, I look forward to working with you on the interstate transport issue as well as other aspects of the bill.

That concludes my statement, Mr. Chairman. I will be pleased to try to answer

any questions.

Table 1.—Interstate Movements of MSW (1989-90)

State	Imports from	Exports to						
Alabama	Georgia; Tennessee	Florida; Georgia; Mississippi.						
Arizona	California	California; Nevada; Utah.						
Arkansas	Oklahoma; Texas	Louisiana; Mississippi; Missouri; Okla- homa; Tennessee; Texas.						
California	Arizona	Arizona; Nevada; Utah.						
Colorado	Nebraska; New Mexico	Nebraska.						
Connecticut	Massachusetts; New York; Rhode Island	Massachusetts; Ohio.						
Delaware		Pennsylvania.						
District of Columbia		Maryland; North Carolina; Pennsylvania; Virginia.						
Florida	Alabama; Georgia; New York	Georgia.						
Georgia	Alabama; Florida; South Carolina; Tennessee.	Alabama Florida; South Carolina; Ten- nessee.						
Idaho		Washington.						
Illinois	Indiana; Iowa; Michigan; Minnesota; Missouri; New Jersey; New York; Wis- consin.	Indiana; Kentucky; Michigan; Missouri; Wisconsin.						
Indiana	Illinois; Kentucky; Michigan; New Jersey; New York; Ohio; Pennsylvania.	Illinois; Kentucky; Michigan; Ohio.						
lowa	Wisconsin	Illinois; Minnesota; Nebraska.						
Kansas	Missouri; Oklahoma	Missouri.						
Kentucky	Illinois; Indiana; New Jersey; New York; Ohio; Pennsylvania; Tennessee; West Virginia.	Indiana; Ohio; Tennessee; West Virginia.						
Louisiana	Arkansas; Texas	Mississippi; Texas.						
Maine	Massachusetts; New Hampshire	Massachusetts; New Hampshire.						
Maryland	District of Columbia; New Jersey; New York.	Pennsylvania.						
Massachusetts	Connecticut; Maine; New Hampshire; New York; Rhode Island; Vermont.	Connecticut; Maine; New Hampshire; Vermont.						
Michigan	Illinois; Indiana; New Jersey; Ohio; Pennsylvania.	Illinois; Indiana; Ohio.						
Minnesota	lowa; Wisconsin	Illinois; North Dakota; South Dakota.						

Table 1.—Interstate Movements of MSW (1989-90)—Continued

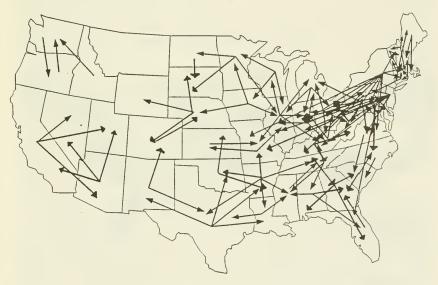
State	Imports from	Exports to
Mississippi	Alabama; Arkansas; Louisiana; Ten- nessee.	Tennessee.
issouri	Arkansas; Illinois; Kansas; New Jersey; New York.	Illinois; Kansas.
Nebraska	Colorado; Iowa	Colorado; South Dakota; Wyoming.
Nevada	Arizona; California	
New Hampshire	Maine; Massachusetts; Rhode Island; Vermont.	Maine; Massachusetts; Vermont.
New Jersey		Illinois; Indiana; Kentucky; Maryland; Michigan; Missouri; Ohio; Pennsylva- nia; Virginia; West Virginia.
New Mexico	Texas	Colorado; Texas
New York		Connecticut; Florida; Illinois; Indiana; Kentucky; Maryland; Massachusetts; Missouri; Ohio; Pennsylvania; Ver- mont; Virginia; West Virginia.
North Carolina	District of Columbia; South Carolina	South Carolina.
North Dakota	Minnesota	South Dakota.
Ohio	Connecticut; Indiana; Kentucky; Michi- gan; New Jersey; New York; Penn- sylvania; West Virginia.	Indiana; Kentucky; Michigan; Penn- sylvania; West Virginia.
Oklahoma	Arkansas; Texas	Arkansas; Kansas.
Oregon	Washington	Washington
Pennsylvania	District of Columbia; Maryland; New Jersey; New York; Ohio.	Indiana; Kentucky; Michigan; Ohio; Virginia; West Virginia.
Rhode Island		Connecticut; Massachusetts; New Hampshire.
South Carolina	Georgia; North Carolina; Virginia	Georgia; North Carolina.
South Dakota	Minnesota; Nebraska; North Dakota	
Tennessee	Arkansas; Georgia; Kentucky; Mississippi.	Alabama; Georgia; Kentucky; Mıs- sissippi.
Texas	Arkansas; Louisiana; New Mexico	Arkansas; Louisiana; New Mexico; Okla- homa.
Utah	Arizona; California	
Vermont	Massachusetts; New Hampshire; New York	Massachusetts; New Hampshire.
Virginia	District of Columbia; New Jersey; New York; Pennsylvania.	South Carolina.
Washington	Idaho; Oregon	Oregon.
West Virginia	Kentucky; New Jersey; New York; Ohio; Pennsylvania.	Kentucky; Ohio.
Wisconsin	Illinois	Illinois; Iowa; Minnesota.
Wyoming	Nebraska	

Table 2.—Interstate Exports of Municipal Solid Waste 1 (1989-90)

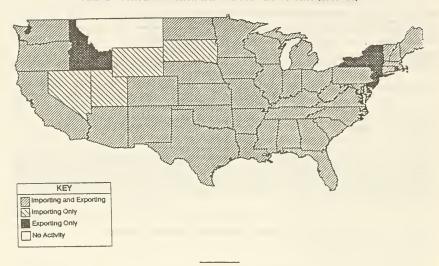
Export volumes (tons/year)	Exporting States									
1,000,000 or more	Illinois, Missouri, New Jersey, New York, Pennsylvania.									
500,000-999,999	District of Columbia.									
100,000–499,999	Connecticut, Indiana, Kentucky, Maryland, Massachusetts, Michigan, New Hampshire, Ohio, Rhode Island, Texas, Vermont.									
Less than 100,000	Alabama, Arkansas, California, Georgia, Idaho, Iowa, Kansas, Louisiana, Maine, Min- nesota, Mississippi, New Mexico, North Carolina, North Dakota, Oregon, Tennessee, Virginia, Washington, West Virginia, Wisconsin.									
Volumes unknown: (All believed to be well below 100,000).	Arizona, Colorado, Delaware, Florida, Nebraska, Oklahoma, South Carolina.									
No known exports	Montana, Nevada, South Dakota, Utah, Wyoming.									

¹ Volume data based on published reports by the congressional Research Service, the New York City Department of Sanitation, and other independent studies; on conversations with state officials; and on a private waste industry survey conducted by NSWMA. Most of the volume data cover calendar year 1989, but a few volumes reflect periods in 1990. The volume data and the export transactions between states are dynamic and subject to change. For example, New Jersey officials have not only revised downward their own export data for 1989, but also estimated further reductions in 1990 of more than one million tons. Also, Montana officials now identify some export activity involving waste shipped from Vellowstone National Park to Idaho.

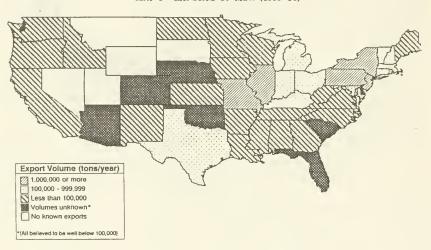
MAP 1-INTERSTATE MOVEMENTS OF MSW (1989-90)



MAP 2—STATE-BY-STATE IMPORT/EXPORT OF MAS (1989-90)



MAP 3-EXPORTS OF MSW (1989-90)



APPENDIX A.—THE INTERSTATE TRANSPORT OF HAZARDOUS WASTE

Special factors apply to hazardous waste

Unlike most other types of solid waste, hazardous waste is already subject to extensive state and Federal regulation. Since the 1980 promulgation of the "baseline" Federal regulations under the Resource Conservation and Recovery Act, hazardous waste regulations have grown increasingly stringent and hazardous waste treatment and disposal costs tlave increased dramatically.

The last five or six years have seen aggressive waste reduction and waste minimization efforts by firms and industries striving to control treatment and disposal costs. While waste minimization and waste reduction may still be an evolving concept in some areas of solid waste management, the concept is already firmly entrenched in the hazardous waste field. Economic self-interest now means that companies work to avoid generating hazardous waste in the first instance, work to minimize the volumes of waste produced where waste generation is unavoidable, and

prefer to treat and dispose of their wastes as close to home as possible to minimize

costs.

One of the most significant developments in hazardous waste regulation—with a major impact on all treatment and disposal practices—is the implementation of EPA's "Land Disposal Restrictions." These regulations prohibit the land disposal of hazardous wastes or hazardous waste treatment residues unless the material meets stringent "pre-disposal" treatment standards. Since most treatment technologies produce some residue, and since EPA maintains that all residues are "hazardous" unless "de-listed" through a multi-year process, the impact of these land disposal restrictions extends to a wide range of treatment technologies. EPA has developed specific treatment standards for hundreds of different wastes and waste residues, either by specifying the mandatory use of a particular treatment technology for a given waste or by setting constituent concentration levels so low that they can only be met through use of one or two specialized technologies a

In many cases the EPA standards call for multiple treatment steps which require a waste or waste residue to be processed at several treatment facilities prior to ultimate land disposal. For example, a metal plating waste containing both metals and organic cutting oils might go to a chemical waste treatment facility for removal of the oils through phase-separation or oilwater separation. The oils might then go to a solvent recycling facility or to a hazardous waste incinerator for removal or destruction of the organic constituents. Finally, the inorganic treatment residues from either the recycling or incineration processes would have to go to a third site for "stabilization" of the metal-bearing residue and for ultimate land disposal in a spe-

cial hazardous waste landfill.

We believe that the move to sophisticated and specialized hazardous waste treatment requirements creates an inevitable and desirable "interdependence" between states—and requires that we avoid barriers to continued interstate movement of hazardous waste for treatment and disposal. Our argument can be roughly summarized as follows:

1) EPA and the states now require that stringent "treatment" standards be met

before a hazardous waste or waste treatment residue can be land-disposed.

2) EPA and the states have set standards which specify particular treatment/disposal technologies—or which can be met only with one or two specialized technologies.

3) In some cases EPA and states require a series of specific treatment steps that

may involve as many as 3 or 4 separate facilities.

4) Most states—and even most multi-state regions'—generate too little of certain kinds of wastes to support the full spectrum of required treatment technologies. (There are approximately nineteen basic technologies required to handle the full range of hazardous wastes. This number is growing.)

5) To meet the stringent standards and provide the required treatment for all of the hundreds of different kinds of hazardous waste—extensive "national" and "state-

to-state" interdependence has developed in the hazardous waste area.

6) Absent the ability to share waste services with other states, industries producing hazardous waste as a by-product of their manufacturing, processing, or site cleanup activities would often face several undesirable options: to shut down; to finance new and extremely expensive in-state capacity (expensive because of relatively low treatment volumes and lost economies-of-scale/also expensive or impossible because in-state capacity would require the siting and permitting of new facilities); to send wastes to potentially less-protective in-state facilities (facilities employing "second choice" technologies or procedures for the management of the waste in question); or even to engage in illegal disposal or "midnight dumping."

States are interdependent in hazardous waste management

As a result of the wide spectrum of treatment and disposal technologies required to safely manage diverse kinds of hazardous waste, the high capital and operating costs required to establish and run hazardous waste treatment or disposal facilities, and the "economies of scale" necessary to support these sophisticated facilities, hazardous waste treatment has always depended on extensive "state-to-state" interdependence. As an example, current cost estimates for the development and construction of a 100-acre hazardous waste landfill range between \$65 and \$100 million dollars. Projected costs for development and construction of a hazardous waste incinerator range from \$40 to \$60 million.

This network of interdependence is documented in NSWMA'S December 1990 report entitled "Interchange of Hazardous Waste Management services Among States." The study is based on "Capacity Assurance Plan" data submitted to EPA

by the individual states in October 1989.

While this data covers calendar year 1987 and reflects certain data inconsistencies (which we discuss and attempt to reconcile in our report), it is generally considered to be the most up-to-date and comprehensive data available on the generation and movement of hazardous waste. In any event, the data is reliable enough to provide us with a reasonable picture of the level of state and regional interdependence that existed in 1987. (We believe, by the way, that more recent data would reveal even more extensive state and regional interdependence --since the Land Disposal Restriction regulations requiring the use of specific treatment technologies were not fully implemented until 1990.)

Our review of the state-submitted data revealed:

· All 50 states exported some hazardous waste to out-of-state treatment and disposal facilities.

48 states imported some out-of-State hazardous waste for treatment and dis-

posal (exceptions were Alaska and Montana).

35 states were "net exporters" of hazardous waste.

The average state exported hazardous waste to 19 other states.

 Coincidentally, the average state imported hazardous waste from 19 other states.

 Showing the specialized nature of required hazardous waste treatment technologies, the average state utilized 12 different hazardous waste treatment and dis-

posal technologies in other states.

• Dividing the country into 10 multi-state regions that parallel EPA's regional structure, 5 regions were "net importers" and 5 regions were "net exporters" of hazardous waste. (Interestingly, in EPA's Southeastern region—where states have been very concerned about the current patterns of import and export—the regional import and export numbers were very close to equilibrium.

 Frequently, states which imported significant quantities of hazardous waste also exported large volumes of waste. (While state officials and citizens are often aware of import levels, they are often unaware of the two-way flow of hazardous waste destined for treatment and disposal. Some of the states where pending legislation would directly or indirectly limit the importation of waste were significant net-exporters in 1987—and are probably still significant net exporters. For example, in 1987 Texas reported exporting 234,717 tons of hazardous waste and importing 173,621 tons. similarly, Pennsylvania reported exporting 363,918 tons and importing 245,646 tons.)

How much waste moves off-site/out-of-state?

The state data reviewed in the NSWMA study indicated that approximately 96 percent of all hazardous waste was treated and disposed at the facility where the waste was generated. Only 4 percent of hazardous waste was shipped off-site, and

only 1.5 percent of all hazardous waste generated was shipped out-of-state.

Admittedly, these on-site/off-site percentages are somewhat misleading. While the data are vague on this point, it is commonly acknowledged that most of the volume of hazardous waste treated or disposed on-site consists of comparatively dilute wastewater. These wastewaters are generally treated and discharged through on-site wastewater treatment plants or are discharged to public sewer systems. Both of these discharge options are regulated under Federal and state water pollution control statutes.

Given this fact, the actual volumes of hazardous constituents (as opposed to total volume of the dilute waste) would not reflect an on-site/off-site difference as dramatic as the referenced 96 percent/4 percent ratio. even with this caveat, however, it is clear that most waste generators prefer to utilize on-site treatment and disposal

where that option is practical.

There are situations, however, where on-site treatment does not make environmental or economic sense. Examples include situations where generators lack the capital or waste-treatment expertise to handle their own wastes, where waste generating facilities are located in areas where on-site waste management would be impractical or environmentally unsound, and situations where the generating facility is prepared to treat some-but not all-of the various types of hazardous waste it produces. (As previously indicated, generators often rely on off-site and commercial treatment facilities where they produce too little of a particular category of waste to make on-site handling possible.) An earlier NSWMA study has indicated that 80 percent of all waste generators rely on commercial treatment and disposal facilities to handle at least some of their waste. The group of waste generators requiring access to off-site commercial treatment and disposal facilities includes some of the largest corporations in the country—as well as many small and mediumsized industries.

From our perspective, we do not see a "flood" of hazardous waste crossing state lines. Instead, we see a surprisingly small percentage of hazardous wastes requiring treatment at specialized out-of-state facilities. While this "export" "import" percentage may be relatively small in terms of total waste-generation levels, it is absolutely vital to industry's continued compliance with tough new environmental standards.

Can interstate agreements and compacts work?

Some observers have suggested that the use of formal Congressionally-approved "state compacts" or less formal "multistate agreements" are the solution to perceived inequities in the distribution of hazardous waste treatment and disposal services. They see these mechanisms as a way to insure that a state is not "taken advantage of" by waste-exporting states that have failed to "do their share" to meet overall waste treatment and disposal needs. Through the compact or agreement mechanisms nism, these observers hope to avoid claims that proposed or recently-enacted waste importation barriers violate the Constitution's "commerce clause" protections for interstate activities.

It is easy to understand the concerns of citizens and state officials who believe that their state has become "the nation's dumping ground"—and who hope to achieve greater equity through a multi-state compact or agreement. However, we have grave doubts whether a hazardous waste compact or "agreement" system would work—or would resolve the problems that are the basis for much of the current dissatisfaction. We believe, as discussed below, that there are alternative strategies which have a better chance of success. First, however, we should consider the retortial problems faced by the "connect to grave the content of the connect to grave the connect the grave the grave

potential problems faced by the "compact/agreement" model.

Many of the problems of the "compact" or "agreement" approach are reflected in the experience of the state compacts being developed under the Low Level Radio-active Waste Policy Act oil 1990 and the Low Level Radioactive Waste Policy Amendments Act of 1985. Under these statutes every state is to become responsible for disposing of the low-level radioactive waste generated within its borders. The statutes encourage the states to negotiate multi-state agreements and contemplate that one of the states in each agreement will "host" a disposal facility to serve the other member states. States within a congressionally approved compact would be authorized to exclude low-level wastes generated outside the compact-area.

The development of these compacts has been an extraordinarily contentious proc-

ess and the original 1985 deadline for operation of the new low-level sites has been legislatively extended until January 1, 1993. In many areas of the country, it is questionable whether this new deadline will be met-or if a disposal site will ever

be successfully established.

Problems include:

1) The difficulty faced by compacts in "sanctioning" individual member-states

which fail to meet their compact obligations.

How do you respond to a state that elects to withdraw from a compact after it has been designated as the "host" state—leaving the other compact states to initiate a new and time-consuming "host state" selection process? How do you respond to a state which continues to "shop around"—either leaving or threatening to leave a compact in search of a "better deal"?

2) Challenges by individual states to the constitutionality of the Federal statutes that require states to handle all their low-level waste in-state or to join a congres-

sionally approved compact.

Michigan, New York and Nebraska are currently involved in court actions

challenging the low-level statutes.

3) Questions as to whether host states have the legal authority or political will to site locally unpopular disposal facilities. Localities will often challenge their designation as the "host community"-

using all the legal and political tools at their disposal.

Even where a state has clear legal authority to site a controversial facility, it is often reluctant to exercise this authority due to political considerations. Commitments by one state administration may be repudiated by a later administration.

4) Huge projected increases in disposal costs for disposal of low-level waste.

The search for greater "equity" between states means that the volumes of waste previously handled by three low-level sites (Washington, Nevada, south Carolina) may ultimately be handled by approximately 16 facilities—with resulting losses in the economies of scale. While the major customers of low-level disposal sites (regulated electric utility companies) may be able to pass-on huge cost increases, many observers believe cost increases for hazardous waste treatment and disposal could cripple American manufacturing facilities engaged in highly competitive national and international markets.

Not only are we concerned with the problems we see with low-level radioactive waste compacts, but we believe the establishment of successful compacts in the hazardous waste area would be even more difficult. Hazardous wastes come from thousands of industrial facilities and "one-time" site-cleanup projects—making both total demand and technology-specific demand very difficult to predict. Moreover, while low-level radioactive waste is amenable to treatment and disposal by only two or three technologies, there are nineteen basic technologies required to handle the full range of hazardous wastes (and this number is growing all the time). To become "independent"—eliminating "out-of-region" imports and exports—most regions would have to site and permit a significant number of new facilities to handle volumes and types of waste which had previously been exported. Ironically, the establishment of compacts or agreements to establish "increased equity" would likely result in additional siting and construction of the types of facilities which were the source of much of the original public concern.

Can we achieve equity in the distribution of management services?

As previously stated, it is NSWMA's position that the interstate movement of hazardous waste is environmentally beneficial. Given the array of sophisticated and expensive technologies required to treat hazardous wastes, interstate sharing of waste treatment and disposal services is the only way that safe treatment and disposal

technologies can be made available at a price that we all can afford.

We recognize, however, the sense of "inequity" that has developed in several states which feel that they are being asked to assume an unreasonable share of the nation's waste treatment and disposal responsibilities. Bills have been proposed which would authorize states to ban out-of-state wastes, to apply "differential fees" to out-of-state wastes (which can often have the impact of an outright ban), or to enter into multi-state "compacts" which could ban "out-of-region" wastes.

We suggest that those proposing these courses of action carefully consider the benefits associated with interstate commerce and the network of "interdependence" revealed in the state-submitted Capacity Assurance Plan data. It does not strike us as logical or desirable to authorize large numbers of states to unilaterally initiate "sanctions" against large numbers of other states—setting off a divisive and counterproductive chain of action and retribution. Surely, there are less disruptive approaches to any legitimate "equity" issues involving the distribution of hazardous waste services.

NEWS RELEASE—STATES DEPEND ON EACH OTHER FOR HAZARDOUS WASTE MANAGEMENT: TYPICAL STATE SHIPS TO 19 OTHERS, REPORT SHOWS

Washington, D.C.—February 1, 1991—No state or region in the U.S. is completely self-sufficient in managing its hazardous wastes, according to a new study by the National Solid Wastes Management Association (NSWMA).

The study shows all 50 states export some of the hazardous waste generated within their borders to other states for treatment and disposal, and 35 states are "net exporters" of hazardous wastes. The average state exports hazardous waste to 19 other states, utilizing 12 different treatment and disposal technologies. Balancing these export numbers, 48 states import waste from other states for treatment and disposal.

"An extensive network of interdependence has developed among the states," said Allen Moore, NSWMA president. "This occurs because individual states and even multi-state regions often do not generate enough of particular kinds of hazardous wastes to support all of the specialized treatment technologies required by law and regulation. This interdependence among the states is logical, unavoidable, and envi-

ronmentally beneficial.'

"It would be folly for states to try to go it alone," Moore said. "If access to outof-state facilities were interrupted, there would be serious environmental and economic consequences. Industries producing hazardous waste as a result of their production and processing activities would often be faced with several flawed options—shut down, pay even higher disposal costs, send waste to less-protective facilities, or even engage in dangerous illegal disposal or 'midnight dumping.'"

"Many citizens fail to recognize the volumes of waste their own state exports or the number of states who share hazardous waste management services with them,"

Moore indicated.

"Waste bans, prohibitive fees, and border closings are not the answer," according to Moore. "Such initiatives not only increase public health and environmental risks, but also damage state, regional, and international competitiveness. At the same time, we must work together to find ways for states to share the burden more equitably." (The study is based on data for 1987 submitted to the U.S. Environmental Protection Agency by the individual states in October 1989. While the data reflects soil inconsistencies, it is generally considered to be the most up-to-date and comprehensive data available on the generation and movement of hazardous waste.)

EXECUTIVE SUMMARY—INTERCHANGE OF HAZARDOUS WASTE MANAGEMENT SERVICES AMONG STATES-A NSWMA REPORT FACT SHEET, FEBRUARY 1, 1991

Background

In October 1989, the individual states submitted data on hazardous waste generation and management to the U.S. Environmental Protection Agency. This data was contained in state "Capacity Assurance Plan" (CAPs) required by the Superfund Amendments and Reauthorization Act (SARA) of 1986-and consisted of actual waste management statistics for calendar year 987 as well as waste management projections for 1989, 1995, and 2009. The recently-released National Solid Wastes Management Association (NSWMA) study focuses solely on the information submit-

While the 1987—the only year for which actual waste management data was reported.

While the 1987 hazardous waste data contains a number of internal inconsistencies, it is still the best and most current data available concerning the volumes of hazardous waste generated in individual states and the hazardous waste import and export patterns between states. NSWMA believes that this data provides a reader of the content of t sonably accurate overview of hazardous waste management in 1987, and is helpful in assessing the basic structure of the hazardous waste management system and the

overall pattern of hazardous waste transfer between states.

The interchange of hazardous waste between states has become controversial, as certain states have acted to limit the interstate movement of hazardous waste-based on the perception that they are being asked to assume an unfair share of the nationwide hazardous waste treatment and disposal responsibility.

In compiling the data submitted by the states, the NSWMA report reflects the ex-

tensive state-to-state interdependence that has developed in the area of hazardous waste treatment and disposal-often prompted by Federal requirements for specialized waste-specific treatment technologies and the fact that few regions or states can support the full-range of required treatment and disposal facilities.

REPORT SYNOPSIS, (BASED ON STATE SUBMISSIONS COVERING CALENDAR 1987)

 All 50 states export some hazardous waste to out-of-state treatment and disposal facilities.

48 states receive some out-of-state hazardous waste for treatment or disposal

(exceptions are Alaska and Montana).

35 states are "net exporters" of hazardous waste.

 EPA requires that most hazardous waste and waste treatment residues meet stringent treatment requirements before the material can be placed in a landfill. Often this means that these materials must be handled by a specialized hazardous waste treatment/disposal technology.

 Most states—and even multi-state regions—generate too little of certain kinds of wastes to support a full-spectrum of required hazardous waste treatment and dis-

posal facilities.

To obtain these specialized services, extensive national and state-to-state inter-

dependence has developed in the hazardous waste area.

• As part of this interdependence the average state exports hazardous waste to 19 other states. The average state also imports waste from 19 other states.

· Showing the specialized nature of the treatment that is often required, the av-

erage state utilizes 12 different hazardous waste treatment and disposal tech-

nologies in other states.

• While approximately 96 percent of all, hazardous waste is treated or disposed of at the industrial facility where the waste is generated, many facilities are unable to treat or dispose of all of the waste they generate. This may be due to location or geological considerations, a lack of capital or expertisE to support sophisticated waste treatment technologies, or the fact that a firm generates too little of a specific waste to justify installation of a specialized treatment technology. More than 80 percent of all firms use commercial waste treatment and disposal services to handle at least some of their hazardous waste.

· Of the hazardous waste which is not handled on-site (4 percent of the hazardous waste generated) roughly 37 percent leaves the state of generations 63 percent

remains within the state.

 While the amount of hazardous waste crossing state lines for treatment and disposal is relatively small in comparison to the total volumes of hazardous waste generated, access to out-of-state facilities is critical to ensure the environmentally-protective treatment of certain wastes which require specialized treatment and disposal technologies.

FIGURE 1.—TOTAL WASTE GENERATED IN STATE IN 1987, EXCLUDING EXEMPT WASTE

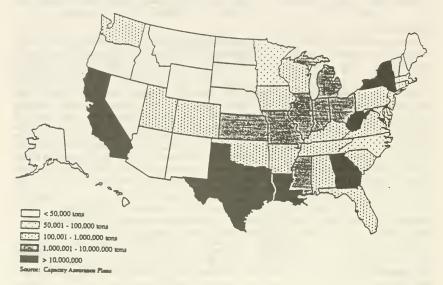


TABLE 1

STATES RANKED ACCORDING TO AMOUNT OF RCRA HAZARDOUS WASTE GENERATED IN 1987

Centers on Reported in the Exempt Exempt State Waste TSCA or Centers on Less Rank All		Hazardous Waste	4					
State CAPs			Includes			Herentons Waste		
Texas 60.072.783 Yes 6.724.000			Exempt	Exempt	TSCA or			
Texast 60.072.983 Yes 6.724.000 \$13.06.983 1 Georgia 39.715.149 No 974 39.915.149 2 Vergram 36.246.474 Yes 36.163.133 101.541 2 Pennsylvania 21.239.650 Yes 22.272.671 960.979 4 California 17.600.000 No 0 17.600.000 5 No 0 17.600.000 No 0 17.600.000 5 No Very Very 16.175.013 Yes 3.180.891 12.594.122 6 West Vurgania 13.792.793 See Note 0 13.792.793 7 Louissania 10.352.836 No 331.098 10.352.836 8 Kantucky 5.787.630 Yes 5.123.944 663.886 9 South Carolina 4.300.021 No 0 4300.023 11 Artanana 2.5731.192 Yes 5.194.135 127.043 10 Methigan 3.430.023 No 0 4300.023 11 Artanana 2.5731.192 Yes 2.770.058 26.489 161.134 12 Ohio 2.722.987 No 0 272.997 13 Illinois 1.891.629 No 21.899.001 1838.766 13 Mississippi 1518.391 No 15.015.880 1518.391 16 Mississippi 1518.391 No 15.015.880 1518.391 16 Mississippi 1518.391 No 15.015.880 1518.391 16 Mississippi 1518.391 No 5.200.000 1238.766 13 Missioni 1227.557 No 0 1217.557 19 Missioni 1227.557 No 0 1229.62 20 Missionin 1227.557 No 0 1217.557 19 Missionin 1227.557 No 0 1229.62 20 Missionin 1229.82 No 0 1229.62 20 Missionin 1229.82 No 0 1229.62 20 Missionin 1229.82 No 0 1229.82 20 Mis	ate	CAPs	Waste?	Waste			Rank(A)	Rank
Georgia 39,915,149		40 002 003	V	4.50				
Virginal 36.264.674 Yes 36.163.133 " 101.541 3 Pennyiwana 23.239.650 Yes 27.278.671 " 960.979 4 California 17.600.000 No			. –			53,368,983		1
Pennayivana 23.239.650 Yes 22.278.671						39,915,149	2	2
California						101,541	3	30
New York 16.175.013 Yes 3.180.891 12.994.122 6 West Vurgnama 13.772.773 See Note: 0 13.772.773 7 Louinanan 10.352.836 No 331.078 10.352.836 8 Kantucky 5.787.630 Yes 5.123.944 66.6.666 9 South Carolina 5.272.178 Yes 5.194.135 127.043 10 Artxanana 2.571.178 Yes 5.194.135 127.043 10 Artxanana 2.571.178 Yes 2.770.58 26.489 161.134 12 Artxanana 2.571.179 Yes 2.770.58 26.489 161.134 12 Artxanana 2.571.179 Yes 2.770.58 26.489 161.134 12 Artxanana 1.891.629 No 0 2.722.987 13 Illinous 1.891.629 No 0 2.722.987 13 Illinous 1.891.629 No 0 1.838.786 15 Adissassrpps 1.518.391 No 15.015.880 1.518.391 16 Annana 1.492.623 No 0 1.232.63 17 Alexanana 1.398.347 Yes 1.519.322 79.025 18 Alasaour 1.217.557 No 0 1.217.557 19 Alabama 871.018 Yes 688.050 182.968 20 Alasachunetts 725.224 No 5.840.000 864.834 21 Alasachunetts 725.224 No 5.840.000 864.834 21 Alasachunetts 725.224 No 5.840.000 864.834 21 Alasachunetts 725.224 No 166.979 518.687 25 Dilahoma 610.993 No 0 610.399 24 Alasachunetts 725.224 No 166.979 518.687 25 Dilahoma 610.993 No 0 610.399 24 Alasachunetts 10.040 No 114.830 180.400 30 Arrykanad 450.784 Yes 436.604 11.190 26 Oomenchest 100.400 No 114.830 180.400 30 Arrykanad 93.570 No 0 225.229 27 Arrykanad 93.570 No 0 12.579 37 Alabamana 27.981 No 1.663.782 254.772 29 Domenchest 100.400 No 114.830 180.400 30 Arrykanad 93.570 No 0 12.579 37 Alabamana 27.981 No 0 0 12.579 37 Alabamana 27.981 No 0 0 12.579 37 Alabamana 32.570 No 0 0 12.579 37 Alabamana 32.570 No 0 0 12.579 37 Alabamana 450.784 Yes 5.3313 12.1990 31 Alabamana 57.071 No 0 0 14.675 40 Alabamana 57.071	,			27.278.671	••	960,979	4	14
New York Vest Virgnam 13.792.793 See Note 0				0		17,600,000	5	3
West Virginian 13.772.773 See Note 0					••	12,994,122	6	5
Louissana 10.352.836 No 331.078 10.352.836 8				0	••	13,792,793	7	4
Kennecky 5,787,530 Yes 5,121,944 661,686 9 South Carolina 5,221,178 Yes 5,194,135 127,043 10 Artexana			No	331,098				6
South Carolina S.321.178 Yes S.194.135 South Carolina S.321.178 Yes S.194.135 South Carolina S.321.179 Yes S.199.001 South Carolina S.32.766 No			Yes	5,123,944				18
Michigan 3.430.023 No 0			Yes	5,194,135				27
Arkanaada 2.931.192 Yes² 2.770.058 26.489 161.134 12 Dhio 2.772.987 No 0				0	••			7
Dho			Yes ²	2,770,058	26.489			26
Illanois			No	0	44			
ndianam 1.838.786 No 0 1.838.786 15 diassesuppy 1.518.391 No 15.015.880 1.518.391 16 dansas 1.432.263 No 0 1.518.391 16 dassour 1.237.537 No 0 1.237.537 19 dassour 1.217.537 No 0 1.217.537 19 Mabama 871.018 Yes 688.030 182.968 20 New Jersey 864.834 No 52.000.000 864.834 21 dassachmetts 725.224 No 5.840.000 725.224 22 Fernessee 683.266 No 17.110.573 683.266 23 Norrida 518.687 No 166.979 518.687 25 Nebraska 450.784 Yes 436.604 14.180 26 Nebraska 450.784 Yes 436.604 14.180 26 Nebraska 450.784 No 0 223		1.891,629	No	21,899,001	44			9
Missesseppe 1.518.391 No 15.015.580	iana	1.838,786	No	0				10
Canalas	ями ре	1.518.391	No	15.015.580	••			11
North Carolina 1.398.347 Yes 1.319.322 79.023 18 Missouri 1.217.557 No 0 1.217.557 19 Alabama 871.018 Yes 688.050 1.216.857 No 1.22668 20 Mew Jersey 864.834 No 52.000.000 864.834 21 Massachmetris 725.224 No 5.840.000 725.224 22 Fernomine 681.266 No 17.110.573 681.366 23 Oklahoma 610.393 No 0 610.393 No 0 610.393 No 0 610.393 14.180 26 Owa 321.529 No 0 14.180 26 Owa 14.180 16.63422 18 Owa 180.0000 180.0000 180.0000 180.0000 180.0000 180.00000 180.0000	nsas	1,432,263	No		••			12
Masouri	rth Carolina	1,398,347						32
Alabama 871.018 Yes 688.050 182.968 20 New Jersey 864.824 No \$2.000.000 864.834 21 Massachmaetts 725.224 No \$3.840.000 725.224 22 Fennames 681.266 No 17.110.573 683.266 23 Dilahoma 610.373 No 0 610.373 24 Pointda 518.687 No 166.979 518.687 25 Vebrakin 450.784 Yes 436.604 14.180 26 ows 321.529 No 0 224.094 28 Mashington 234.712 No 1663.422 224.712 29 Domesticut 180.400 No 114.830 180.400 30 Venconsin 175.311 Yes \$3.313 121.978 31 Lotorido 119.903 No 0 91.570 33 danyiand 92.570 No 0 91.570 33 danasaota 58.765 No 42.706 \$3.765 34 Pergon 30.918 No 0 30.918 35 Lyrisona 27.981 No 3.633.822 27.981 36 Lotorido 14.015 No 0 17.523 39 Lelahoma 14.015 No 0 12.644 6.650 43 Lerinona 5.458 No 0 12.072 41 Lelaine 11.455 No 0 14.055 42 Lerinona 5.458 No 0 15.553 42 Lerinona 5.458 No 0 15.553 42 Lerinona 5.458 No 0 15.553 39 Lerinona 14.015 No 0 14.015 40 Lelaine 11.455 No 0 14.055 42 Lerinona 5.458 No 0 5.458 44 Lerinona 5.458 No 0 12.072 41 Lelaine 11.455 No 0 14.055 42 Lerinona 5.458 No 0 5.458 44 Lerinona 5.458 No 0 5.	MONT.							13
Sew Jersey Se4_E34 No \$2,000,000 \$64_E34 21	theme							
Massachusetts								24
Fernemese 683.266 No 17.110.573 = 683.266 23 Dilahoma 610.373 No 0 = 610.373 24 Porrida 518.687 No 166.979 = 518.687 25 Vebrakin 450.784 Yes 436.604 = 14.180 26 ows 323.529 No 0 = 233.529 27 Jinh 264.094 No 900.000 = 264.094 28 Washington 234.712 No 1.683.422 = 234.712 29 Democratical 180.400 No 114.830 = 180.400 30 Visiconsin 175.311 Yes 53.313 = 121.998 31 Delorado 119.903 No 0 = 119.903 32 daryinad 92.570 No 0 = 93.570 33 diamenta 58.765 No 42.706 = 58.765 34 Uriscons 27.981 No 0 = 30.918 35 Uriscons 27.981 No 3.633.822 = 27.981 36 Loois Island 26.715 No 4.340 13.761 12.554 37 Velorado 14.015 No 0 = 17.523 39 Velorado 14.015 No 0 = 17.523 39 Velorado 14.015 No 0 = 12.572 39 Velorado 14.015 No 0 = 12.572 39 Velorado 14.015 No 0 = 12.572 39 Velorado 15.752 No 0 = 17.523 39 Velorado 16.004 14.015 No 0 = 12.072 41 Velorado 16.005 14.015 No 0 = 14.015 40 Velorado 16.005 14.015 No 0 = 12.072 41 Velorado 16.005 14.015 No 0 = 12.0072 41 Velorado 16.005 14.015 No 0 = 12.0072 41 Velorado 16.005 14.015 No 0 = 12.0074 44 Velorado	/							15
Dilahoma								16
Sile,687 No								17
Nebresian 450.784 Yes 436.604 14.180 26 25 25 27 25 27 25 26 26 26 26 27 27 27 27								19
Section Sect							_	20
Dish 264.094 No 900.000 264.094 28								38
Vashington 234.712 No 1.663.422 = 234.712 27 Connecticut 180.400 No 114.830 = 180.400 30 Vascomm 175.311 Yes 51.313 = 121.998 31 Lotorado 119.903 No 0 = 119.903 32 daryiand 91.570 No 0 = 91.570 33 danaesota 52.765 No 42.706 = 52.765 34 Vregon 30.918 No 0 = 30.918 35 Vregon 30.918 No 0 = 30.918 35 Vregon 30.918 No 0 = 30.918 35 Vregon 27.981 No 3.653.882 = 27.981 36 Lhode Leland 26.715 No 4.340 13.761 12.954 37 Aleaware 25.528 No 0 = 25.528 38 lew Hampshire 17.523 No 0 = 17.523 39 dabo 14.015 No 0 = 17.523 39 dabo 14.015 No 0 = 14.015 40 torth Dalota 12.092 No 0 = 12.092 41 laine 11.455 No 0 = 12.092 41 laine 11.455 No 0 = 11.455 42 ermont 10.344 Yes 1.070 2.644 6.630 43 fyoming 4.437 No 0 = 4.437 45 ew Memoo 4.165 No 0 = 4.437 45 ew Memoo 4.165 No 0 = 4.437 45 ew Memoo 4.165 No 0 = 4.165 46 pount Dalota 2.460 No 0 = 4.165 46 pount Dalota 1.931 No 0 = 4.165 46 pount Dalota 2.460 No 0 = 4.165 46 pount Dalota 1.931 No 0 = 4.165 4	-							21
Consecticuit 180,400 No 114,830 ** 180,400 30 Microsses 175,311 Yes 33,313 ** 121,998 31 Coloresdo 119,903 No 0 ** 119,903 32 Asraystand 92,570 No 0 ** 93,570 33 Asraystand 92,570 No 0 ** 93,570 33 Asraystand 92,570 No 0 ** 30,918 No 0 ** 30,918 35 Aresons 27,981 No 3,633,822 ** 27,981 36 Abode Island 26,715 No 4,340 13,761 12,554 37 Delevence 25,528 No 0 ** 25,528 38 No 0 ** 25,528 38 No 0 ** 17,523 No 0 ** 17,523 39 No 0 ** 14,015 No 0 ** 14,015 40 No 0 **								22
Vinconsm 175.311 Yes 53.315 ** 121.998 31 2dorsdo 119.903 No 0 ** 119.903 32 dansesots 52.765 No 0 ** 91.570 33 dansesots 52.765 No 42.706 ** 52.765 34 Pregon 30.918 No 0 ** 30.918 No 0 ** 30.918 No 0 ** 30.918 35 Pregon 27.981 No 3.453.882 ** 27.981 36 Pregon 27.981 No 3.453.882 ** 27.981 36 Pregon 27.981 No 0 ** 25.528 No 0 ** 25.528 No 0 ** 25.528 No 0 ** 17.523 39 dansesots 17.523 No 0 ** 17.523 39 dorstn danse 11.455 No 0 ** 12.072 41 laine 11.455 No 0 ** 14.015 42 fermont 10.344 Yes 1.070 2.644 6.330 43 Pregoning 4.437 No 0 ** 5.458 44 Pregoning 4.437 No 0 ** 4.437 45 Few Memoro 4.1455 No 0 ** 4.437 Few Memoro 4.1451 Few Memoro						234.712		23
Colorado						180,400		25
Section Sect	CORRE		Yes	27717	**	121,998	31	28
SE/NG No 42.706 ** SE/NG 34	orado	00-1	No	0	••	119.903	32	29
No	ryland	93.570	No '	0		93,570	33	31
27.961 No 3.653.8E2 ** 27.961 36	LINGSOCIA	SR.763	No	42,706	**	58.765	34	33
Lhode Island 26,715 No 4,340 13,761 12,954 37 belowere 25,528 No 0 •• 25,528 38 inv- Hampshru 17,523 No 0 •• 17,523 39 inlored Hampshru 17,523 No 0 •• 17,523 39 inlored 14,015 No 0 •• 14,015 40 incre Dalacte 12,092 No 0 •• 12,092 41 laine 11,435 No 0 •• 12,092 41 laine 11,435 No 0 •• 11,435 42 incre 11,435 No 0 •• 11,435 43 incre 11,435 No 0 •• 11,435 44 incre 11,435 No 0 •• 11,437 45 incre 11,435 No 0 •• 11,437 45 incre 11,435 No 0 •• 11,435 46 incre 11,435 No 0 •• 11,435 And 0 incre 11,435 No 0 incre 11,435 And 0 incre 11,435 An	egon	30,918	No	0	**	30.918	35	34
Selever Sele	2004	27,981	No	3,653,882	••	27.981	36	35
17.523 No	benial ste	26,715	No	4,340	13.761	12,954	37	40
Saho 14.015 No 0 = 14.015 40 Jorth Dakota 12.092 No 0 = 12.092 41 Jaine 11.435 No 0 = 11.435 42 Jordana 10.344 Yes 1.070 2.644 6.630 43 Journa 5.458 No 0 = 5.458 44 Jyoung 4.437 No 0 = 4.437 45 ew Memor 4.165 No 0 = 4.165 46 outh Dakota 2.460 No 0 = 1.460 47 gweii 1.931 No 0 = 1.931 48	SASTA .	25,528	No	0	••	25,528	36	36
forth Dakota 12.072 No 0 •• 12.072 41 laine 11.435 No 0 •• 11.435 42 fermont 10.344 Yes 1,070 2,644 6,430 43 lossman 5,458 No 0 •• 5,458 44 /yousing 4,437 No 0 •• 4,437 45 ew Memoro 4,185 No 0 •• 4,165 46 posts Dakota 2,460 No 0 •• 2,460 47 sweii 1,931 No 0 •• 1,931 48	- Hampshire	17,523	No	0	••	17.523	39	37
Orth Delices 12,092 No 0 ** 12,092 41 laine 11,435 No 0 ** 11,435 42 ermont 10,344 Yes 1,070 2,644 6,430 43 losteins 5,458 No 0 ** 5,458 44 ryoming 4,437 No 0 ** 4,437 45 ew Memoro 4,165 No 0 ** 4,165 46 outh Dalotta 2,460 No 0 ** 2,460 47 swell 1,931 No 0 ** 1,931 48	bo	14.015	No	0	••	14.015	40	39
Anine 11.455 No 0 •• 11.455 42 ermont 10.344 Yes 1.070 2.644 6.430 43 consuma 5.458 No 0 •• 5.458 44 cycning 4.437 No 0 •• 4.437 45 erm Memon 4.165 No 0 •• 4.165 46 esth Dakotn 2.460 No 0 •• 2.460 47 ermit 1.931 No 0 •• 1.931 48	th Dakota	12.092	No				41	41
ermont 10,344 Yes 1,070 2,644 6,650 43 lonnana 5,438 No 0 = 5,438 44 younng 4,437 No 0 = 4,437 45 ever Memoo 4,165 No 0 = 4,165 46 outh Dahota 2,440 No 0 = 2,440 47 swaii 1,931 No 0 = 1,931 48				-	••			42
COURDINA S.ASS No				*	2644			43
young 4.437 No 0 ** 4.437 45 sew Memoro 4.165 No 0 ** 4.165 46 such Dakota 2.460 No 0 ** 2.460 47 swaii 1.931 No 0 ** 1.931 48								44
young				•	••	0		45
Dath Dakota 2,460 No 0 ** 2,460 47 gradi 1,931 No 0 ** 1,931 48							_	44
renii 1931 No 0 ** 1,931 48								47
				•		-		
			*		'			48
leska 1.067 No 0 707 1.067 49		******				*****		50

⁽A) According to Hazardous Waste Generation Reported in the CAPs
(B) According to Hazardous Waste Generation Less Except Waste

1 Wast Virgans did not include the weight of the wastr in its aqueous waste stream.

2 Based on estimates provided by the California Department of Health Services.





	111	11	11	11	1	11		11,	1	, ,	1	1	1	11	1	111	2	Hi	إرجم	, Jan 1	٠,	18	1	1	4	٧.	. 1	20	A. A.
EXPORTING STATE	444	۳,	00	0 4	7 .	0 4 .	7.	44	4	Ψ.	14.	7.7	4	7 1		771		~ ~	7,1	200	4	0-1	1	4.	1	4	2 20 3	. 4 4	40 AC
Michael		e i			le.		ı la		- 1.			1			1				ه ا ه			1		٠.			1 .		
- budg		-1	•		1.		T	-	-11			1	-		1	Ψ.	1	-	-1-		_	a `		٣.	_	-	1 '		-
Maria .		0			0		le.		- 1	- 6		1			1		d .		•			١ ،		- 1			ol e		
Manag	9 9	_1			1		10		9 1	0 i	j	1						0 0	1	. 0				• 1			1		
Dallingsin	0 0	ना			10		10			0 0		т	-	0	10	0 0		0	0 0	· ·		0 0	P	01		0 0	0 0		0.0
Datemate						•	o je			0 (•	1		0			1		•					•		0 0			
Casanetina		0			1		1:			0 () (e			ļ		1 .		e e					• [
Dubreum	•	0	•		0					0 (ě			<u>! _ </u>		L		0 0			_	0	•					1
Territo .		-01			3		10			•	1	T =			П		3		6 6					ΒF		4			
Dorgh	•	- 1			0		1		- 14	0		1			1		ŀ				- 1			•			1		
tred			•			- 4	ч.		- 1								1							- 1			1		
Date Company			• •		4-		10			0 0		ㅗ			<u> </u>		L.					<u></u>		_L			•1		1
	9 0				l:	•	1.		Я			1	٠	ā			1		9 9			8.4		•		9 4	1		
indone lone	: :		•	:	10	-				: :		1							•		- 1	•	9	91.		•	. •	9	
	: .	:	-		1							1					١ ٠				9			9 6		::	12		
Legen Legens	-	ᇷ	-	_	10		- 1		. 1	-	_	+	-	6 6	- a	-	-		K Z				-	4	_				1:-
Lentino		-			15		1		٠١.	٠,	,	1	:	• :			1 :				-			: I		:			
Hales		~1			1-	•	10		Пă			10	÷	-	1 -					- :	-1			ΞI.	- 1	:			
		- 1		ě	le.		l.					1-	÷	-	1		° :				- 1	٠,		ăl.		:			
Harphad		-61		-	10	_	i è					-		•	-		10.			_ `	-+			٠,	_	-	1 0		-
Makhan		-		-	10		10		П			1	-	•	1		١٠ :			- :	- 1	٠.		-11		:	ı •		
			. "		1	٠.	ı la		٠ŀ							٠.	1 3			- :	.1	•		-1-		: .			
		21	•		le		10		ш			Ή	ĕ				1 '	, ,	1		-			: I •					
	- 6	ă	6	-	10	-	1ě		11			-		8	-	-	-	-	-1-		ă	- 6		šŀ		1 - 3	_		
-	-	- 1		-	1-		1-		٠.		_	1	_			-		-	1	_	-1	_	_	- 1	_		1		_
Monda		e l			1		le.		ماه			ł							st.		al						1	-	
Bready			• `		1		ľ		١,			1	_		1				1	ě	-			Ť]		• •	1		
Port Pharpoints		- 61		0	1		18		_	_		18	8		$\overline{}$				10	- 6	-1			e 1 -	- 0		$\overline{}$		
Rea Strang	•	0					10		- 14			10		0 0			1		10		-1		0 0				i •		
New Meetes		0			10				- 1	- 6		1							ri –		0						1		
New York	Ψ	9			<u> e </u>	•				2.0		10	9	₽	9_		9 9		10		<u> </u>	_ 0				₽	0 0	- 0	
Plants Corpilate						•	10		ज्ञ	•		Į.		- 1			-		1		9			D -			. 0		
Harth Dates		- 1			1				네.		٠.			•			١.		1.		•			-			1		
Otalo	•	9			0	٠.			9 4			1			:		•		. 0		•			₽					
	•		•-	•	10	-	0	-	١,	-	_	-		-	-	-		_	+-	_÷	-	_		-		•_			0
Compan					10	. :			113									٠.	.la	. :	ı.			- 1		٠.			
Pennylmonia Disala brissal		٩l		: "					٠l۵					-						• •	٦,			71				•	•
Seeds Corolles		-1		•	1.		15		11								١,				-1	- :		"			1 -		
James Carrollan James Daniera		-	_	_	10	<u>-</u>	-18-		-1"			10	-		_	-	-	_	+-		ēŀ.	_		+					_
James Colores James colo						:			٠l۵							-			la.		-1					. :			-
Terms			: .		15		12		4												-10	. :	- 1	1		•			
(ha			: :		1"	-	I.		SI.						1								-	1		. "	1 "	. "	
V-		-4			+		10		š la	0 6		18	-	_	_		0 0		1		-		0 0	1	_	_	1	7_	
Treputs					l.		10		"12			le.											- 4	1					
Property Control of the Control of t	٠.				I.		10		٠ľ			1	_						l e		- 1	· ě			-			-	-
Stee Virginia		-			1		10		~ 1 a	· ě								0	i e			ě		1					
Penns	8 6	61	2	-	+-		10	0.0	613			10		-	0				0	- 0	0		0 0	PÎ T			-	_	-
		-	٠.	_		-	le.		٦ [٦			1							1		- 1								
Dynamic																													

Read across rows to see where a state exports to.

FACTS ABOUT: ECHO MOUNTAIN FACILITY, SAWYER, ND

The echo Mountain Facility is designed to state-of-the-art engineering standards with the primary goal of protection of the environment and human health. Although only non-hazardous wastes will be accepted for disposal, the site and cell design incorporates many features used for the containment of hazardous wastes. The Echo Mountain Facility is permitted by the North Dakota State Department of Health as a special-use, industrial waste management facility. The five-year facility permit was reissued in June, 1991.

In addition to the high-quality low permeability clays which underlay the entire site, some of the major features of the facility include:

Annual average precipitation of only 17 inches.

 A minimum five-foot thick bottom liner consisting of re-compacted clay with a permeability of 1 x 10(-7) cm/sec or less.

Three-foot thick (minimum) re-compacted clay sidewall liners with permeability

less than $1 \times 10(-7)$ cm/sec.

 The permit requires two High-Density Polyethylene (HDPE) liners over the five-foot thick clay liner, forming a double composite liner system.

· Liquid that drains through the waste will be directed to a leachate collection

system of perforated piping where it is removed from the cell.

• A geotextile filter net will be placed above the HDPZ liner and sloped to the leachate collection drains.

· A non-woven geotextile filter fabric will be placed immediately over the drain-

age net to prevent siltation or clogging.

· A one-foot thick layer of sand beneath a one-foot thick layer of protective soil or screened waste will be placed above the non-woven geotextile fabric to protect the liner against puncture or deformation by heavy equipment, prior to placement of waste.

· A system of groundwater monitoring wells are in place for regular evaluation

of groundwater quality beneath the site.

When each cell of the disposal site has been filled with waste, it will be covered by three feet of compacted clay with a maximum permeability of 1 x 10(-7) cm/sec that has been sloped to ensure drainage of surface water away from the cell. The clay layer will be covered by a 60 mil HDPE liner, a drainage layer to intercept any water that soaks in, a non-woven geotextile fabric, a three-to-four foot thick layer of clay-rich soil, covered by twelve inches of topsoil, which will be planted in native hardy grasses for vegetation cover.

In the review of the permit application, the North Dakota State Department of

Health made the following statements regarding the facility and its design.

• Relative to site hydrogeology—"* * * the main Coteau Bed (aquifer) present at the site is physically and hydrogeologically isolated from the portion used as an aquifer elsewhere." (Source: Page 39, North Dakota State Department of Health Review Document)

· Relative to public and private water supplies-"There are no downgradient wells within a two-mile radius." (Source: Page 51, North Dakota State Department

of Health Review Document)

"No public water supplies within the region (Benedict, Max, Minot, North Prairie Rural Water, Sawyer, and Velva) are within the same aquifer as that underlying Echo Mountain, therefore could not be adversely impacted by waste disposal activities at the facility." (Source: Summary of Pages 43-45, North Dakota State Department of Health Review Document)

 Relative to the cell cap design—"An extensive review was conducted by the North Dakota State Water commission to evaluate the performance and long-term integrity of the cap. The Water commission concluded, The cap should survive an indefinite (thousands of years) length of time." (Source: Page 52, North Dakota

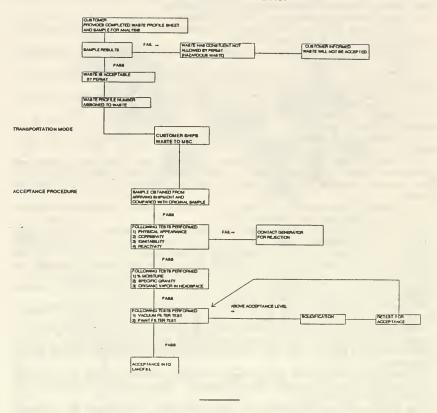
State Department of Health Review Document)

· Relative to the performance of the cell design-"The North Dakota State Department of Health conducted a Hydrogeologic Evaluation of Landfill Performance (HELP) model to determine the efficiency of the cell design to protect groundwater resources." (Source: Page 93, North Dakota State Department of Health Review Doc-

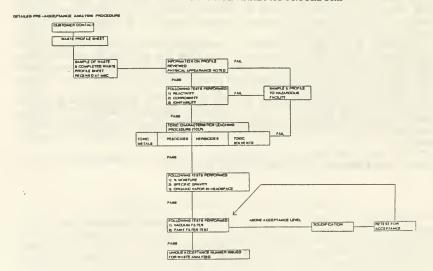
overall efficiency of the landfill is 99.97 percent." (Source: Page 94, North

Dakota State Department of Health Review Document)

PRE-ACCEPTANCE ANALYSIS



DETAILED PRE-ACCEPTANCE ANALYSIS PROCEDURE



MUNICIPAL SERVICES CORPORATION

DEFINITIONS OF KEY TERMS USED BY THE NORTH DAKOTA DEPARTMENT OF HEALTH

In order to understand the way the operation of a waste management facility such as Echo Mountain Facility is controlled by the North Dakota Department of Health and Consolidated Laboratories it is important to understand the definition of key terms. Listed below are definitions of key terms as they are used by the NDDOH.

Aquifer means a geological formation, group of formations, or portion of formation

capable of yielding significant quantities of ground water to wells or springs.

Commercial waste means solid waste generated by stores, offices, restaurants, warehouses, and other nonmanufacturing activities exclusive of household waste,

inert waste, infectious waste, industrial waste and hazardous waste.

Facility means all contiguous land and structures, other appurtenances, and improvements on land which include one or more solid waste management units, such as a transfer station, solid waste storage building, a solid waste processing system, a resource recovery system, an incinerator, a surface impoundment, a surface waste pile, a land treatment area or a landfill. A facility may or may not be used solely for solid waste management.

Garbage means putrescible solid waste such as animal and vegetable waste resulting from the handling, preparation, cooking, and consumption of food, including

wastes from markets, storage facilities and processing plants.

Ground water means water below the land surface in a geologic unit in which soil pores are filled with water and the pressure of that water is equal to or greater than

atmospheric pressure.

Hazardous waste means any waste or combination of wastes of a solid, liquid, contained gaseous, or semisolid form which (a) because of its quantity, concentration, or physical, chemical, or other characteristic, in the judgment of the department may (1) cause, or significantly contribute to, and increase in mortality or an increase in serious irreversible or incapacitation reversible illness, or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, disposed of, or otherwise managed; or (b) is identified by the mechanisms established in this chapter. Such wastes include, but are not limited to, those which exhibit extraction procedure (EP) toxicity, corrosivity, ignitability, or reactivity.

Municipal landfill means any publicly or privately owned landfill that receives household waste and disposes of the waste. This landfill may also receive other types of wastes, such as asbestos, agricultural waste, commercial waste, non-hazard-

ous sludge, and inert wastes for disposal.

Municipal waste incinerator ash means the residue produced by the incineration

or gasification of municipal waste.

Residue means all the solids that remain at the completion of the gasification, burning or incineration of coal, household waste, commercial waste, infectious waste, or industrial waste including bottom ash, fly ash, grate siftings, and flue gas desulfurization materials.

Run-off means any rainwater, leachate, or other liquid that drains over land from

any part of a facility.

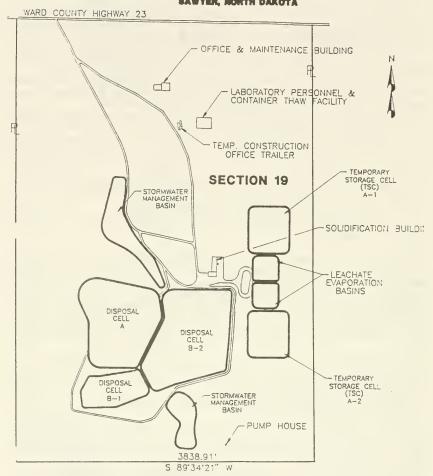
Run-on means any rainwater, leachate, or other liquid that drains over land onto

any part of a facility.

Studge means any solid, semisolid, or liquid waste generated from an industrial wastewater treatment plant, water supply treatment plant, or air pollution control equipment other than baghouses at coal preparation facilities, exclusive of the treated effluent from a public wastewater treatment plant.

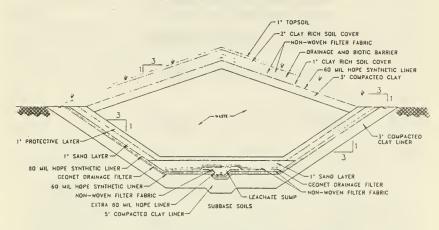
60 050 0 02 4

MUNICIPAL SERVICES CORPORATION ECHO MOUNTAIN FACILITY SAWYER, NORTH DAKOTA



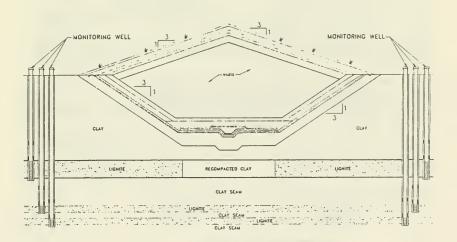
FACILITY LAYOUT

MUNICIPAL SERVICES CORPORATION ECHO MOUNTAIN FACILITY SAWYER, NORTH DAKOTA



CELL DESIGN

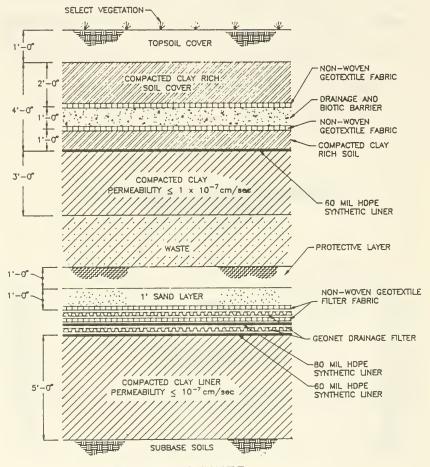
MUNICIPAL SERVICES CORPORATION ECHO MOUNTAIN FACILITY 8AWYER, NORTH DAKOTA



GROUNDWATER MONITORING SYSTEM

MUNICIPAL SERVICES CORPORATION ECHO MOUNTAIN FACILITY SAWYER, NORTH DAKOTA CROSS SECTION DESIGN

COMPOSITE CELL CAP



COMPOSITE LINER

["Interstate Movement of Municipal Solid Waste," by the National Solid Wastes Management Association and "Economic Impact of the Municipal Services Corporation's Echo Mountain Facility and Container Plant," by F. Larry Leistritz may be found in the committee's files.]

HELP PROTECT NORTH DAKOTA—VOTE YES ON MEASURE 7

Did you know-

· That the waste industry is targeting North Dakota as a dump ground for the

nation? That examples are: Fargo—Medical Waste; Bismarck—Medical Waste (Medical Waste includes infectious waste, body parts, contaminated animal carcasses used in research, infectious agents, waste blood, and used hypodermic needles); Sawyer-Industrial Waste and Incinerator Ash; Grant County-Nuclear Waste; Richland County-Hazardous Waste; Your hometown-?

• That General Motor's garbage, including paint sludge and other Industrial Waste, is already heading to Sawyer, North Dakota? (Bismarck Tribune, July 18,

1992)

 That Union Pacific Railroad and its subsidiary companies, Municipal Services Corporation (M.S.C.) and U.S. Pollution Control Inc. (U.S.P.C.I.) are buying or ob-

taining options to buy thousands of acres near Sawyer to use for a dump site?

• That Union Pacific Railroad and U.S.P.C.I. have a long history of literally hundreds of waste facility violations and fines? (Grand Forks Herald, July 26, 1992):



• That Union Pacific Railroad, U.S.P.C.I. and M.S.C. are proceeding with the Sawyer dump site despite the fact that an Environmental Geologist for the N.D. Geological Survey concluded that the site is "geologically poorly suited for waste disposal?" Study, Edward C. Murphy, August 31, 1990. That the concern is the threat of contamination of the area's ground water, surface water, soil, and ultimately the Souris River?

 That incinerator ash, industrial waste, medical waste, and other types of waste contain very hazardous substances such as lead, cadmium, mercury, arsenic, and dioxins? And, that these substances are known to cause (1) cancer, (2) brain, kidney,

and liver disorders, and (3) birth defects?

· That a study by the Yale University Medical School recently concluded that birth defects increase the closer one gets to waste dump sites? (Bismarck Tribune, July 28, 1992.)

What can you do?

Don't allow headlines like these to be North Dakota's future:

"Poisoned legacy—Chicagoland's environmental nightmare. Jobs are gone but the cleanup is left to be done." Chicago Tribune, October 7, 1991.

"Minot—Landfill cleanup could cost \$1 million. Cleanup of [Minot's] old landfill southwest of town could cost \$1 million." Bismarck Tribune, September 2, 1992.

"Filthy, dirty, nasty work—Homeless men recruited to unload trash train. A company under the gun to get rail cars full of New York garbage unloaded and trucked to Illinois landfills is paying dozens of homeless men to do the smelly, dirty work. 'I didn't want to come up with some disease,' said one man. 'We've found hospital waste, needles, gauze with blood all over it,' said another. And another said 'The only thing I haven't seen yet in that trash is a body.' "Grand Forks Herald, July 29, 1992.

"Couple sues BN for spill in Superior—claiming a toxic chemical spill involving a derailed tanker caused them permanent health damage." Grand Forks Herald,

July 29, 1992.

"Eighteen companies accused of dumping hazardous waste in the Stringfellow acid pits near Los Angeles agreed to pay \$150 million in past and future cleanup costs to settle part of a huge civil lawsuit over the site. The cost of cleaning up the waste, which has endangered some local water supplies, has been estimated at as much as \$750 million." Wall Street Journal, July 31, 1992.

An issue relating to dumping waste in North Dakota will appear on the November

3, 1992 ballot. Concerned citizens have initiated a measure which will:

· Establish an Environmental Protection and Recycling Fund.

• Impose a fee on waste generated beyond 100 miles from its disposal site equal to the fee at the disposal site closest to where the waste was generated. (Example: The North Dakota fee on General Motor's waste generated in Detroit would be the same as Detroit's fee. North Dakota would no longer be a cheap place to dump the nation's waste, and that dumping would be reduced.)

 Impose a fee of 50 cents per ton for waste generated within 100 miles of the disposal site. This fee would apply to most waste generated in North Dakota. The City of Grand Forks has determined that this fee would raise the average family's

garbage bill approximately 13 cents a month, or \$2 to \$3 per year.

• Direct that 50 percent of the fund be used for recycling and 50 percent be used

for environmental clean up, after administrative expenses have been met.

If you are concerned, you must get involved! Make a sign. Put it in your yard, window, or car. Have your children help. Talk to your neighbors. Call your friends. Get out the vote by driving the elderly to the polls. Tie green ribbons on your trees. Donate Help and Money! Don't let our beautiful state become a dumping ground for the nation.

Prepared Statement of Representative Pam Gulleson, District 26

Thank you for the opportunity to testify this morning. I speak today in favor of this bill.

As you know, the topic of out-of-state waste has become a very familiar one to those of us from southeastern North Dakota. Early this winter, we became aware of plans by U.S.A. Waste, Inc. to expand the existing landfill in Gwinner. The plans call for the landfill to increase volume to upwards of 2000 tons per day. Most of this waste is targeted to come in from out of state. Many, many residents of the Gwinner and surrounding area are strongly opposed to this plan. While company officials try to sell this idea from the economic development angle, the people of the area aren't interested. It's not that the people down in this corner of the state don't recognize an excellent economic opportunity when they see it, because believe me they do. They are home to the largest Melroe plant in the state and very supportive of that company. They also have Ray-Mac Manufacturing, Gwinner Oil, Truck and Trailer Repair and other valuable businesses in their community, not to mention an area of beautiful farmland here many rural families make their living. These people know economic development when they see it and they don't see garbage as a longterm benefit to their community. In fact, they are worried about property valuation, home values, water and resource preservation as a result of huge volumes of outof-state garbage being brought in.

Something else that needs to be said though, is that the people of our area also recognize the need to responsibly deal with the garbage that we all generate. No one is opposed to having the landfill accept the garbage that is generated from our region. We understand full well that it has to be deposited somewhere, and a regional landfill is a realistic approach. What we strongly disagree with is the creation of a megalandfill where the goal is to bring in as much volume as possible in order

for the company to profit tremendously.

As I have tried to help the area residents deal with this issue over the winter, I was constantly frustrated by the lack of consideration that is given to the local citizens views. It seems that most of the cards are in the hands of the companies who buy these landfills for profit. Local people have found themselves powerless to halt the process. In 1992 the U.S. Supreme Court decision in Fort Gratiot v. Michigan Department of Natural Resources highlighted the inability of localities to protect themselves from unwanted waste. The Supreme Court struck down a Michigan law that allowed local governments to ban the importation of any waste generated outside their jurisdictions. The court reiterated that the Constitution prohibits states and localities from discriminating against the commerce, including garbage, of another state, unless authorized to do so by Congress. That court decision emphasizes

the need for this bill.

While I would like to see this bill go a step further and include industrial wastes, I think it provides an important first step. Thank you for the opportunity to speak to you today.

PREPARED STATEMENT OF DAVID L. OLSON

SHOULD CONGRESS ALLOW STATES TO RESTRICT OUT OF STATE WASTE

Dwindling landfill capacity in several northeastern states and relatively low or non-existent tipping fees in Midwestern states have prompted the recent thousands of ton per month of -waste shipped into North Dakota. Congress is debating whether or ton per month of -waste snipped into North Dakota. Congress is debating whether or not to allow states to ban waste imports or charge a different tipping fee for out-of-state waste. In New York and New Jersey between October 1991 and July 1992, the tipping fee at the fresh kills landfill in New York rose from 80 to 150 dollars per ton. Tipping fees in New Jersey have increased to 150 dollars per ton. In North Dakota the tipping fee for out-of-state waste is minimal to nothing. Even with transportation costs, it is far cheaper for corporations and states to ship their waste to states like North Dakota. As quoted in the Minot Daily Newspaper a GM executive from Ohio was delighted to be shipping tons of GM paint sludge to ND so they could from Ohio was delighted to be shipping tons of GM paint sludge to ND so they could in his words, "reduce their environmental liability."

The flood of exported waste into states like North Dakota comes as a result of

many reasons but to highlight just a few:

1. The "reclassification of incinerated waste from hazardous to special" so it can

easily be shipped and protected under the Interstate Commerce Clause. 2. Western states have inadequate regulatory laws as to the new siting of megadump landfills.

3. Budgetary restraints on Health Depts for qualified personnel to oversee and

sample mega-dump waste.

4. Many states' restrictions on waste imports are being struck down because they

were seen to interfere with the Interstate Commerce Clause.

To give you a pertinent and recent example; In the 1993 North Dakota legislative session, legislation was introduced that said in effect: If you are exporting waste from state X into North Dakota, if your state tipping fee is \$30.00 then when you dump here the tipping fee shall be \$30.00. The bill failed. In my opinion, the bill failed because in asking a particular legislator why he or she voted nay the response usually had a common theme: He or she had been intensely lobbied by attorneys and lobbyists from the waste industry, and they were convinced any legislation such as this would result in litigation to the state or its officials, as it was touted as "a violation of Interstate Commerce".

What is so difficult to get across to a state legislative subcommittee or a legislator is the fact that there are three avenues open to states trying to come to grips with

the absolute flood of toxics coming into their state.

The first avenue is the evenhandedness doctrine. A state can regulate an inter-state commercial activity in order to address a legitimate local public interest as long as the regulation treats in state and out-or-state parties the same and has minimal effects on interstate commerce.

The second is Public Health and Safety.

The third is market participation exception to the interstate commerce clause. For example. state can participate in the market for education and deny residents of other states the use of public schools or charge them higher fees than its own residents.

States' attempts to use the evenhandedness doctrine or public health and safety considerations to regulate the importation of waste have or-ten failed. This is because the evenhandedness doctrine is difficult to get into legislation, and along with Public Health and Safety is endlessly litigated by the waste industry and its army of lawyers. The market participation is difficult for a busy lawmaker to grasp and understand and takes state officials willing to help implement it and make it work.

As I mentioned at the start Congress is debating this issue. Senate bill S. 2877

introduced by senators Dan Coats and Max Baucus addresses many problems states

have concerning the importation of waste.

For example, in the last two years we have 2 mega-dumps here in North Dakota. One with options on thousands of acres. We now have the nuclear industry lobbying the legislature to let them dump here, we now have an out-of-state company that is going to build an incinerator to burn of all things medical hazardous waste, and I ask you where are we going to dump this ash? and on and on.

Congress has to address a situation that is not even-handed. People who work for a living cannot be at the legislature every day countering high paid lobbyists and lawyers who work for only one goal: To get waste dumped cheap.

We are not NIMBY's, or environmental radicals. We all make waste and we know we must handle it. We also ask for a rational, common sense approach to the absolute flood of lawyers threatening one and all if interstate commerce is violated. Let Congress address the waste issue and pass a law that says: states have a right to say yes to the importation of waste if that states citizens vote yes, that states may say no or at least have the right to charge a higher fee to handle the inevitable future or the common of the states of the charge and the states of the common of the states of the common of the states of the state ture problems with having millions of ton of toxics buried in your land now and for-

States are willing to work with other states concerning the importation of waste. solutions can be worked out to satisfy and protect public concern for health and safety. States can implement a common sense fee if they choose to import waste. In North Dakota right now we are forced to take thousands of ton a year of waste from all over the United States by a company that has paid over 2.6 million in fines for transporting hazardous materials nationwide.

It is late but not too late for congress to say, yes states have the right to regulate waste coming into and being buried within their borders. After all, its is going to be buried within those borders FOREVER.

LETTER FROM FRANCIS J. SCHWINDT, CHIEF, ENVIRONMENTAL HEALTH SECTION, North Dakota State Department of Health and Consolidated Laboratories

June 17, 1993.

The Honorable BYRON DORGAN, U.S. Senate, Washington, DC 20510

DEAR SENATOR DORGAN: This letter is to provide comments to the U.S. Senate Committee on Commerce, Science, and Transportation regarding the interstate transportation and disposal of municipal waste.

The North Dakota State Department of Health and Consolidated Laboratories is responsible for the management of solid waste in North Dakota. The Department's authority for managing solid waste is limited to the protection of human health and

the environment.

In recent years the Department has received applications for several controversial waste management facilities. Although the Department has legal authority to evaluate a facility's impact on human health and the environment, the Department does not have authority to assess a facility's impact on local roads, property values, or economy. Repeatedly, the public has expressed frustration over their inability to have meaningful input into site selection and permit decisions, especially regarding the importation of out-of-state waste, which may have a direct impact on local val-

In order for the citizens of North Dakota to have input into these site selection and permit decisions which may directly impact them, the Department supports legislation which provides the governor the flexibility to make decisions on the impor-tation of municipal waste. The Department would additionally support broadening

the scope of this legislation to include industrial waste.

We appreciate the opportunity to comment on this proposed legislation.

Sincerely,

Francis J. Schwindt. Chief, Environmental Health Section.

PREPARED STATEMENT OF JEANNE KOSTER, SOUTH DAKOTA PEACE AND JUSTICE CENTER

The South Dakota Peace and Justice Center urges passage, with strengthening, of S. 439, to amend the Solid Waste Disposal Act to permit Governors to limit the disposal of out-of-State solid waste in their States. The South Dakota Peace and Justice Center is an interfaith, nonprofit, grassroots organization of over 700 families, institutions, and congregations. The purpose of the Peace and Justice Center is to work together in South Dakota and Indian country to change unjust social structures by applying spiritual values through education and action.

At present, a State may desire with good reason to prevent private business from importing for disposal municipal solid waste (MSW) generated elsewhere. However, a State may be forced to accept the imported MSW because refusal to accept may

be deemed a violation of the commerce clause of the U.S. Constitution. Interpretation of the commerce clause to impose such a limitation on State power seems, to us, to be a failure of representative democracy which calls for congressional remedy. We feel that, with some strengthening, S. 439 would be an appropriate remedy.

Why does use of the commerce clause to limit State power to refuse or curtail MSW imports betray our institutions of representative democracy? We say this because citizens in any State have a right to rely on State government to shield the general public welfare in that State from clearly avoidable harm in areas where State government has jurisdiction, such as public health and the environment. Likewise, citizens have a right to expect government to prevent unwanted and avoidable expense to the State treasury. An MSW landfill, even one operating at state of the art and in compliance with the new subtitle D criteria of the Resource Conservation and Recovery Act (RCRA), may pose significant and long term danger to public

health and the environment and expense to the public treasury.

Credible scientific studies funded by the Environmental Protection Agency (EPA) support the view that MSW landfills pose danger to the environment and public health. The EPA declared back in 1981 that there is no such thing as a landfill liner that won't leak. More recent federally funded studies have only confirmed the 1981 conclusion.2 The burden of all these studies is that no liner system in existence and no top cover system known to humankind can keep a landfill from eventually leaking. The best engineered measures can only postpone the inevitable. Furthermore, leachate collection systems designed to catch and hold leakage from MSW landfills cannot be engineered to avoid eventual failure.3 In other words, the MSW landfill state of the art is simply incapable of preventing a landfill from contaminating the environment, most critically, the ground water, RCRA Subtitle D regulatory compliance notwithstanding.

Just how serious a threat to health and environment is contamination from an MSW landfill? Typically, MSW leachate represents a very serious threat. Dr. Kirk Brown and Dr. K.C. Donnelly of Texas A&M University concluded in a 1988 study

that leachate from MSW landfills can be just as dangerous as leachate from federally regulated hazardous waste landfills.⁴
An important reason for MSW leachate toxicity (and carcinogenicity)—without doubt, the chief reason in many cases—is that MSW landfills have historically received and, under new RCRA Subtitle D regulations as they mesh with RCRA Subtitle C, will continue to legally receive considerable quantities of hazardous chemical waste from institutions, businesses, and industry. Under RCRA Subtitle C, the federal hazardous waste law, "small quantity generators" may send up to 2,460 pounds per year of "characteristic" (legally hazardous) waste to MSW landfills. A generator qualifies for this very common "conditional exemption" from expensive federal hazardous waste disposal requirements if it produces under 220 pounds (100 kilograms) per month of characteristic wastes. Due to this loophole, in many communities, the amount of hazardous waste going to MSW landfills exceeds the amount going to federally regulated hazardous waste disposal facilities.

Adding to the characteristic wastes legally sent to MSW landfills by businesses, institutions, and industry is another significant category of toxics—those exempt from subtitle C regulation because they are for household use. These include "household quantities" of various solvents and cleaning agents, pesticides, polishes, oils, paints and thinners, et cetera. Furthermore, a number of reactive discards which are not toxic at all in household quantities—liek vinegar, toothpaste, shampoo, table salt, and soda pop—readily precipitate toxic reactions in the anaerobic and acidic environment of an MSW landfill, normally inert products of modern industrial society such as plastic can degrade, liberating degradation products which are toxic in

themselves or which combine with other MSW components to create toxics.

Lee and Associates, 67 pp.

3"Leachate Collection Systems: The Achilles' Heel of Landfills," Rachel's Hazardous Waste
News, No. 119 (March 7, 1989).

¹Federal Register, February 5, 1981, pp. 11128–29; May 26, 1981, pp. 28314–28.

²See Background Document on Bottomliner Performance (1987), NTIS Document No. PB87–18229–1; "Diverse Contaminant Transport in Natural Clay," Environmental Science and Technology (March 1989), pp. 340–49; R. Bonaparte and Beth Gross, "Field Behavior of Double-Liner Systems," in R. Bonaparte, ed., Waste Containment Systems: Construction, Regulation, and Performance (1990), New York: American Society of Civil Engineers, pp. 52–83; G. Fred Lee and Anne R. Jones, Municipal Solid Waste Management in Lined, "Dry Tornb" Landfills: A Technologically Edward Approximation of Grandware Outlife, 1992) Macreto CA. G. Fred logically Flawed Approach for Protection of Groundwater Quality (1992), Macero, CA: G. Fred

^{4 &}quot;An Estimation of the Risk Associated With the Organic Constituents of Hazardous and Municipal Landfill Materials," Hazardous Waste and Hazardous (Spring 1988), pp. 1-30.

More than 60,000 chemicals are used commercially in this country.⁵ Virtually all of them are found in MSW landfills. Is it any wonder that, as Brown and Donnelly report, the health risk of MSW leachate compares to that from hazardous waste leachate?

For how long will MSW landfills remain a serious danger? Donald U. Wise, University of Massachusetts at Amherst geology professor, asserts that society must be prepared for the "inevitability of ultimate failure of the [MSW landfill] system" over a timeframe that is cast in geologic terms, not just the 30- to 50-year timeframe of presentday landfill engineering plans. "The next 1,000 years might be a reasonable number," says Professor Wise, who summarizes his warning by declaring, "I believe we should recognize that society is creating new geologic deposits * * *"6

Because all landfills pose serious and long-term risk, the current trend is to con-

solidate landfilling into centralized facilities. Some consolidation makes practical administrative and fiscal sense if landfills require vigilance over centuries as well as repeated engineering fixes in response to inevitable failures generation after generation. However, consolidation itself compounds some of the worst risks of landfilling. "Higher levels of contamination and, thus, higher risks are associated with larger facilities that have a greater mass of waste," according to the EPA.7

Even with consolidation for administrative efficiency, today's landfills will be black holes into which public treasuries of the future will be obliged to empty themselves. Think of the cost of engineering fixes and cleanups in response to toxic leakage far into the future. The bonds and assurances required of landfill operators will be exhausted or reclaimed by them over the relatively short time of 30 to 50 years. Long afterward, taxpayers will be shelling out for landfill reengineering and remediation as well as for possible public health monitoring and health-related assistance that may be required after environmental contamination. Surely State governments are wise to demur at long-term fiscal responsibility for geologic deposits of cancers, birth defects, immune system disorders, disorders of the reproductive system and the nervous system, allergies, and the countless chronic and disabling miseries which credible studies increasingly trace to toxic proliferation in modern life.8

The dangers to public health, environment, and treasuries hold true, of course, for all MSW, for that generated within a State as well as for that which might be imported. If the people of a State, with eyes wide open to the danger, choose to add the risk of imported MSW to the risk they already bear from their own waste, of course, the can legally do so. However, using the commerce clause to force a State to unwillingly accept MSW forces State government to break faith with its citizens, both present and future. Can it be just to force a State to assume serious and avoid-

able public risk to protect the profit of private business? We think not.

We advocate for passage of S. 439, clarifying the right of a State to refuse or curtail MSW importation. We wish to suggest a strengthening of the bill which, we believe, will make it an appropriately stronger instrument of representative democracy. Presently the bill provides that, under certain circumstances, the Governor of a State may ban or freeze MSW importation. We ask that the bill be amended to provide that a Governor must ban or freeze MSW importation in order to properly execute the will of the people of the State under the following circumstances: (1) if the State legislature passes a resolution or a special bill directing the Governor to ban or freeze a specific MSW importation; (2) temporarily, during the interim between introduction of such a bill or resolution before a State legislature and eventual passage or failure of the measure; (3) in the case of a State that has the constitutional right of initiative or referral, if the people of the State approve an initiated ballot measure which bans or freezes a specific MSW importation, or if they strike down in a referral to the State electorate an act of the State legislature to approve such importation; or (4) temporarily, during the interim between announcement of a citizen campaign to initiate a ban or freeze on a specific MSW importation, pending the outcome of the initiative or referral campaign.

Over the past decade, the State of South Dakota, in which our organization is incorporated, and Indian country within the borders of South Dakota, has been the target of at least 20 major schemes by private business to import out-of-State waste for disposal, in some cases from as far away as Florida and California. Periodicals

⁵ See GAO Reports and Testimony: December 1991, p. 8.

⁶In Iowa Department of Natural Resources Briefings (Fall 1991), p. 4.

 ⁷Federal Register, August 30, 1988.
 ⁸See Rachel's Hazardous Waste News No. 313 (November 25, 1992); No. 318 (December 20, 1992); and No. 342 (June 17, 1993).

with nationwide circulation have portrayed South Dakota neighbor States in this old

west region as "the answer" to the Nation's MSW problem.

This Nation certainly has an MSW problem. The core problem, however, is not that populous places need to persuade sparsely populated places to take their MSW. In view of the fact that no option for MSW disposal presently exists that does not pose long-term, serious danger to health, environment, and public treasury, the only wise answer to the MSW disposal problem is for this Nation to break free of the throwaway paradigm in which it is culturally imprisoned. We must work concertedly, with due speed, toward transformation to a recycling culture and economy that emphasizes resource conservation and efficiency. We must have a parallel goal of drastically reducing and, finally, eliminating toxicity and toxic potential in whatever small amount of waste is unavoidable.

Among the first rank of industrial nations, our own is a laggard in working toward such a transformation. European nations and Japan are much further down the road of waste minimization and recycling. ¹⁰ In addition, with the Paris convention signed by 13 European nations in September 1992, the European Community took a giant step, far surpassing any effort in this country, toward weaning Euro-

pean economies from toxics.11

A word is, perhaps, in order at this point concerning MSW incineration as an alternative to MSW disposal. Although incineration results in reduction of the volume of MSW, it is not a desirable method of MSW management. Rather than promoting resource efficiency, waste minimization at the source, it enables households and other MSW generators to maintain the throwaway status quo. Indeed, it requires maintaining the throwaway status quo because a constant high volume of waste is required as feed to keep the capital- and technology-intensive incinerator operating at top capacity in order to pay back a public investment or make a profit for a private incinerator business. A notorious case from Minnesota is illustrative. The MSW incinerator in Hennepin County, MN, tired to prevent used telephone books in the region from being recycled, forgoing the books to say in the waste stream that feeds the incinerator. The recycling company had to sue and endure two rounds of appeal in order to rescue the recyclable material from the incinerator's maw. 12

Furthermore, MSW incineration exacerbates the problem of waste toxicity. Burn-

ing away the organic constituents of MSW leaves ash with heavy metals typically metals, display the more volatile ones such as lead, cadmium, and mercury—which are present in MSW in dangerous amounts—to the environment via stack gases. Furthermore, incineration creates toxic compounds which were not present in the MSW feed, extremely dangerous hydrocarbons such as dioxins and furans,

which both remain in the ash and are liberated in stack gases.

MSW incineration does not even obviate the need for landfilling. Landfill disposal is still required for the ash, with its toxic burden of dangerous hydrocarbon products of combustion and heavy metals in more dangerously reactive form than their original state in unburned MSW.¹³

We ask for passage of S. 439, with the strengthening amendments we have suggested, clarifying the right of a State such as South Dakota to refuse or curtail imported MSW for disposal, whether the MSW be destined for landfilling or for incineration. We foresee that S. 439 could catalyze important change in the direction of a resource conservation culture and a more efficient economy. It could be an important step toward lessening our Nation's dangerous reliance on landfilling and toxics.

When householders and small quantity generators of characteristic wastes can no longer readily export their toxic problems, they will have a powerful incentive to push our society to "clean up its act." They will see that their own self-interest requires serious effort at minimizing waste to be landfilled as well as speedy reduction of reliance on toxic substances. Passage of S. 439 could speed a transformation that our Nation must undergo to ensure long-term environmental and, ultimately, eco-

¹¹ See Rachel's Hazardous Waste News No. 319 (January 6, 1993).

⁹ See "America's Outback," Newsweek (October 9, 1989), pp. 76-80; and Jay H. Lehr, "South Dakota Is the Answer, What Is the Question?" Ground Water (May-June 1991), pp. 322-26.

10 See Daniel Lazare, "Recycled But Not Used," The Amicus Journal (Fall 1991), pp. 20-27; and Adrienne Redd, "How Recycling Efforts Around the World Stack Up," The Amicus Journal (Fall 1991), pp. 23-24.

¹² See Waste Recovery Co-op of MN and US West Marketing Resource Group, Inc. v. County of Hennepin, N.W.2D 892 (MINN. APP. 1991).

¹³ The most comprehensive, readable, and technically credible current summary of the environmental disadvantages of incineration is Pat Costner and Joe Thornton, "Playing With Fire" (1990), New York: Greenpeace Public Information Office, 1436 U Street, N.W., Washington, DC 20009. The book deals directly with the environmental drawbacks of hazardous waste incineration. 20009. The book deals directly with the environmental drawbacks of hazardous waste incineration, but its major conclusions apply as well to MSW incineration.

nomic sustainability—transformation to a recycling economy with zero discharge of toxic wastes.

Prepared Statement of Robert L. Knudson, General Manager, Municipal Services Corp., Echo Mountain Facility

THE ROLE OF LARGE CORPORATIONS

Senator, there has been a great deal of concern expressed over the fact that large corporations involved in waste management are coming into rural communities with the intent of building facilities to accept waste from a wide variety of states. I would like to take this opportunity to address this issue and make a few comments.

Senator, the reason large companies are now building the bulk of the new waste management facilities nationwide relates directly to the extensive laws passed by Congress that regulate environmental facilities. Small operators are gradually disappearing from the waste management business because Congress and the EPA have enacted rigorous environmental rules and regulations governing the construction and management of waste management facilities. These standards were developed to provide maximum protection to human health and the environment. The cost of meeting these standards, however, is tremendous. Effectively, the independent or "mom and pop" operator of the past has essentially been taken out of the marketplace. Additionally, if a small operator goes out of business, the local community, waste generators—perhaps local industrial and agricultural interests—and the state and federal government will be stuck with the financial responsibility of cleaning up the facility. Most often large companies are the only ones that can afford to spend the millions of dollars needed to comply with environmental standards requiring such design specifications as synthetic liners, ground water monitoring and leachate collection systems. In addition, large companies are usually the only ones with the capital required to hold post facility closure bonds guaranteeing that waste management facilities are properly closed and managed for 30 years thereafter. It is also important to note that many small operators are typically unable to secure the necessary liability coverage needed for such a facility.

Senator, It seems to me that Congress has created a system whereby only big companies can partake. It also seems logical that Congress would want large companies in this business-companies that will be responsible for their operations and will put their financial assets on the line. In MSC's case, Union Pacific Corporation backs our operation with more that \$15 billion in assets. Certainly it is in their interest to take every measure possible to guarantee that MSC constructs and operates in a fashion that will not jeopardized their assets. That is why they will have spent more that \$19 million building a facility that far exceeds the required standard constructs and constructs are constructed to the construct of the construction of the

ards for industrial non-hazardous waste management.

Additionally, Senator, it is my understanding that federal, state and local governments neither desire, nor can they afford to build waste management facilities to accommodate all types of wastes generated within each state's boarders. Local governments are increasingly getting out of the waste management business and contracting with companies that are willing to invest the necessary capital and accept the long-term liability. Either by default or by design, federal environmental laws have created a system which places the future of waste management in the arena of large corporations.

THE COST OF RURAL DISPOSAL

Another claim that has been made is that waste disposal facilities located in rural areas, often far away from the waste generator, are used because they offer a less expensive disposal option than perhaps a facility located nearby, notwithstanding the fact that waste must be transported great distances. In our case, this simply

is not true.

Contrary to popular perception, waste is not transported to North Dakota because MSC offers inexpensive disposal options. In fact, exactly the opposite is true. Our facility was very expensive to build and accordingly, we must charge a higher per ton fee in order to help recapture our capital investment. In addition, the generator must pay the added transportation costs. These factors do not work to our favor in the competitive marketplace and do not make our facility a less expensive disposal option than those available in other states where the waste may be generated.

option than those available in other states where the waste may be generated.

The reason a generator would choose a facility like MSC's is that we offer long-term liability protection. Historically, factories have disposed of their non-hazardous industrial waste in local municipal dumps with minimal technology utilized to protect the environment These same factories ended up being responsible parties on a

variety of Superfund sites. Therefore, in order to avoid the threat of potential longterm liability exposure, a waste generator is willing to pay the added transportation cost and the increased disposal cost to get waste to a facility that provides maximum environmental protection.

RURAL STATES AND THE COMMERCE CLAUSE

During the hearing, it was inferred that rural states are unable to protect them-selves from waste companies siting facilities because of the Commerce Clause. While I am not a lawyer, it is my understanding that the Commerce Clause of the Constitution grants the same protection to all states regardless of their geographic and demographic composition. The fact that certain states are more ideally suited to host waste management facilities and lack of available land near large urban areas appears to be a greater factor in determining the location of waste management facilities. Once these facilities begin accepting out-of-state waste, the "NIMBY" (Not In My Back Yard) attitude prevails without regard to the fact that moving waste

from one state to another may be the best thing to do for the environment.

As you know, many states have challenged their role in the out-of-state waste issue and, in an 8 to I decision in June, 1992, the Supreme Court ruled in Chemical Waste Management, Inc. v. The State of State of Alabama, that "No State may attempt to isolate itself from a problem common to the several states by raising barriers to the free flow of interstate commerce." Most of the legislative proposals being considered by Congress clearly discriminate against waste generated outside the state, and plainly discourages the full operation of the facility. The Commerce Clause is based on the notion that the prosperity—and continued existence—of the country depends upon an open and competitive national economy and marketplace. For more than 200 years, it has served the country—and our economy—effectively and fairly. State barriers, whether imposed at the state level or through federal legislation, will undermine the basic philosophy that serves as the backbone of our country's economic structure.

OUT-OF-STATE WASTE AND HUMAN HEALTH

Many of our opponents have argued that the long-term social and economic future of North Dakota is jeopardized because they feel the quality of the health and environment is compromised because of out-of-state waste. With the current health standards set by the North Dakota Department of Health (NDDOH), the state has the option of not permitting a facility that they feel might propose a threat to any of North Dakota's citizens. And if health and safety have in any way been compromised, North Dakota's argument to use litigation to halt the flow of out-of-state waste would be substantially different than the argument used by the State of Michigan in Fort Gratiot Landfill v. Michigan Department of Natural Resources.

OPTIONS OF THE STATE UNDER A BAN

Senator, seemingly, if all states placed a ban on out-of-state waste and, if a private company was not willing to site a facility to manage municipal and industrial waste in that particular state, perhaps due to liability concerns or because the geology was not suited, it would effectively force states to site facilities in areas where it might pose a threat to the environment because of the geology. Another factor is that private industry would not necessarily be willing to site because of liability and artificial limits on the marketplace because of the ban. Most states and local governments are already experiencing severe budgetary problems and would be faced with the added problem of finding funds to construct environmental facilities once private industry becomes unwilling to do so. If a state were to find another state willing to accept its waste, the agreement would be in jeopardy every time a new governor were to take office.

RECYCLING AND THE NEED TO LANDFILL

Senator, there is the popular perception that companies involved in the waste disposal business generally oppose recycling efforts because it means less waste will be available to landfill. Our company does not oppose recycling and waste reduction efforts. In fact, USPCI, our parent company, is heavily involved in recycling efforts—particularly in solvent and oil recovery. Our primary customer at the Echo Mountain Facility is also heavily involved in recycling efforts and, in fact, only a small percentage of the total waste volume generated by them is actually sent away for treatment and disposal. The common perception that waste disposal facilities make a convenient excuse not to recycle is false. It is important to note, however, that even with the most comprehensive recycling and waste reduction programs in

place, this country will still produce a great deal of waste that can not be recycled or reused. And until we develop other options, the remaining waste must be treated and disposed using the best available environmental technology available. Senator, I am confident that we are now using that technology at our facility.

THE MSC FACILITY AND PROTECTION OF WATER RESOURCES

A great deal of concern has been expressed over MSC's ability to protect the ground water and the underlying aquifer. I would like to take a moment to explain the system in place to protect ground water and the underlying aquifer. Senator, this is a concern we hear quite frequently and I feel very confident about our ability

to protect these valuable water resources.

Each cell includes a leachate collection system designed to detect and collect any liquids before they pose a danger to the groundwater. When present, the leachate is pumped, tested and disposed of in a manner consistent with the permit. Additionally, each cell has its own system of groundwater monitoring wells, designed to detect the release of any leachate from the cell. In the unlikely event that a release occurs, the groundwater monitoring wells would provide for early detection of the

problem allowing for a quick response.

Regarding the effects the facility might have on an underlying aquifer, extensive site hydrogeological investigations have been performed to characterize any and all groundwater. Based upon the NDDOH review and analysis of the site hydrogeology, they wrote, "the Main Coteau Band (aquifer) present at the site is physically and hydrogeologically isolated from the portion used as an aquifer elsewhere." Further, the NDDOH found that there are no down gradient wells within a three mile radius, and no public or private water supplies within the region (twenty-five mile radius) are within the same aquifer as that underlying Echo Mountain. Even excluding the many environmental features built into the cell and cap designs, the site, according to NDDOH, cannot adversely impact local groundwater.

PREPARED STATEMENT OF GENERAL MOTORS

General Motors appreciates the opportunity to comment for the record regarding

interstate transportation and disposal of solid waste.

General Motors (GM) has an active interest in this issue because we have entered into a long-term contract with USPCI to dispose of industrial waste in the Echo Mountain site near Sawyer, North Dakota, and because GM's operations throughout the United States require interstate shipping of industrial waste.

POSITION

GM disposes of hazardous and non-hazardous industrial wastes in facilities providing environmentally sound treatment and disposal, regardless of location, in order to protect human health and the environment, to assure compliance with federal and state regulations, and to avoid future cleanup liability to the maximum extent possible. Any restriction on the interstate movement of such waste would disrupt the national market for waste treatment and disposal services, which is essential for the cost-effective and environmentally sound management of the nation's waste. In addition, in today's competitive world market, any unnecessary burden puts U.S. businesses at a competitive disadvantage with foreign competitors. Thus, GM opposes any restrictions on the interstate movement of hazardous and non-hazardous industrial waste.

The vast majority of industry relies on facilities in other states to provide treatment and/or disposal services for some portion of the hazardous wastes, as well as non-hazardous wastes it generates. In many states, there are actually no locations suitable for industrial waste disposal facilities. Authorizing states to ban or to impose differential fees on the import of hazardous or industrial waste would disrupt

what is, overall, a functional system of interdependence among the states.

There are many reasons why no single state is able to accommodate the treatment or disposal of all of the hazardous and non-hazardous industrial waste generated within its boundaries. A particular state may have geographical or geological constraints, or lack sufficient volume of a specific waste to support a particular specialized treatment technology. Forcing facilities to be built in such states would result in unnecessary potential environmental threats or economically non-viable operations

In an effort to dispose of waste in an environmentally sound manner and to avoid cleanup liability, GM and other industrial generators thoroughly screen waste treatment and disposal facilities. This results in significant competition among waste management facilities. Restrictions on interstate movement of wastes would inter-

fere with this competition and with the ability of waste generators to select the most environmentally protective waste management facility.

BACKGROUND

As a responsible corporate citizen, GM is dedicated to protecting human health, natural resources, and the global environment. We do this by integrating sound environmental practices into our business decisions, and therefore, responsible waste

management plays an important part in those decisions.

GM's waste management activities support the EPA environmental management hierarchy, which places highest priority on pollution prevention, followed by recycling, treatment and, finally, disposal. Pollution prevention or source reduction requires a manufacturer to design products, and their associated processes, in ways that avoid producing waste in the first place. Recycling involves treatment and/or reuse of materials from the waste stream. The lowest priorities involve the responsible treatment and/or disposal of the wastes that are unavoidable and which do not lend themselves to reuse or recycling.

CM'S POLLUTION PREVENTION EFFORTS

GM is taking many positive and decisive steps to reduce waste and increase the efficiency of raw material usage. In order to accelerate the process of waste reduction, GM instituted its WE CARE program (WE CARE is an acronym for Waste Elimination and Cost Awareness Rewards Everyone) in its U.S. and Canadian facilities in 1991, followed by the Mexican facilities in 1992. WE CARE provides the um-

brella over many of our environmental stewardship efforts.

WE CARE was introduced first in our passenger car platforms and powertrain operations, and then in all North American manufacturing operations. Training videos, posters and guidebooks were disseminated throughout our operations with stepby-step instructions and worksheets for implementing a waste reduction program. In April of this year, WE CARE was adopted as one of our 38 corporate business strategies and will officially become a joint process with the United Auto Workers (UAW) union. Additional guidelines for all employees and training materials will be developed as part of the joint GM/UAW process and the ongoing, continuous improvement process will become formalized.

In October, 1992, GM management endorsed a Cleanup Solvent Conservation initiative, under the WE CARE program, that suggests specific methods to be used in

paint shop cleaning operations to reduce the usage of solvents.

In November, 1992, WE CARE was integrated into GM's employee Suggestion Plan. Through the plan, employees are encouraged to turn in suggestions that reduce the usage of raw materials, especially toxic materials, reduce the generation of waste, or benefit the environment in some way. Employees making valuable suggestions under the program can receive non-monetary awards or up to a maximum

of \$20,000 (which is based on 20 percent of the suggestion's first year savings).

In addition to its WE CARE initiatives, GM has been implementing chemicals management contracts throughout its North American Operations since the late 1980's. The contracts are established at individual facilities with the specific intent to reduce the amount and number of different chemicals being used at that facility. Suppliers work with the facility to find better ways to operate our processes with fewer and less toxic chemicals. In many cases, the supplier is compensated on a units-produced basis, rather than on chemical usage, which provides the supplier with an incentive to maximize the efficiency of the chemicals used. Over half of our facilities now have such contracts in place and have realized an average reduction of thirty percent in their chemical usage. The other facilities are in the process of

evaluating chemicals management programs.

Regarding our external activities—GM is participating in the EPA 33/50 program to voluntarily reduce toxic emissions. Since the majority of our reductions of the 17 33/50 chemicals came during the 1980's with major facility renovations and technology changes, we have targeted reducing the five chlorinated hydrocarbons on the EPA's list. Our goal is to achieve a 75 percent reduction by 1995, from a 1987 base year. As of the end of 1990 we had reduced the emissions of these five chemicals

by 48 percent.

September, 1991, the American Automobile Manufacturers Association (AAMA), of which GM is a member, entered into a voluntary agreement with the Michigan Department of Natural Resources (MDNR). The partnership is known as the Automotive Pollution Prevention Project (or Auto Project.). Under the Auto Project, the AAMA and the MDNR have agreed to work together toward prevention of the release of persistent toxics that have a significant, negative impact on the Great Lakes. This effort is one of several initiatives being undertaken as part of the Great Lakes Pollution Prevention Action Plan. The Auto Project emphasizes: identifying persistent toxics of concern to the Great Lakes, establishing priorities among them for pollution prevention, and identifying steps that can be taken voluntarily by the auto companies and their suppliers to reduce and/or prevent the generation and release of these priority materials of concern so as to minimize any significant

impact.

The Auto Project provides an opportunity for government and industry to cooperatively address significant environmental issues. The auto companies and MDNR have agreed to a list of persistent toxics which will be targeted for pollution prevention. Each of the companies have also identified historical efforts to reduce the use and generation of these substances, in order to document the progress that has been made by the industry to date. As the companies evaluate which of these materials are used in their operations, they are also identifying means for source reduction. In October, 1992, the AAMA held a forum for the suppliers of its member companies to communicate the companies' voluntary commitment and solicit the suppliers' cooperation in reducing persistent toxic substances in their manufacturing processes and products. Approximately 250 people attended representing 100 auto suppliers, the auto companies, AAMA, the State of Michigan, the State of Ohio, the U.S. EPA, Canada, the United Auto Workers (UAW), environmental groups and the media. The auto companies also mailed out a communications package on the Auto Project to approximately 5,000 auto suppliers. The auto companies will continue to work with their suppliers to advance pollution prevention projects through technical assistance, information sharing and technology transfer.

GM'S REUSE/RECYCLING EFFORTS

As part of WE CARE, several recycling initiatives have been launched. In 1991, detailed guidelines were distributed throughout GM's U.S. operations on establishing office paper and corrugated cardboard recycling programs. Plants have been recycling other materials as well. In the two years since the program began, the passenger car and powertrain operations have recycled 28,000 tons of corrugated cardboard and office paper, 7,000 tons of wood pallets, 1,100 tons of plastics, 600 tons of lead-acid batteries, 1,500 tons of solvents, 6,800 tons of waste oil, and 633,000

tons of scrap metal.

For many years, GM has implemented used oil recycling, wherever feasible, either at the facilities where the used oil was generated or through local contract recyclers, reclaimers and refiners who commit to meet GM's strict requirements. This ensures that GM waste oil is handled in an environmentally responsible manner. The oils are processed for reuse as soluble oils, maintenance lubricants, performance oils or burned for energy recovery. In 1992, GM instituted a Corporate Used Oil Program. This program utilizes the excess capacity of the waste treatment facilities at its Clark Street (Detroit, Michigan) plant to treat the waste oil generated at seven other GM facilities in Michigan. For 1993, the seven plants are expected to generate approximately six million gallons of oily waste. This waste will be shipped to the Clark Street facility where the water and any solids will be removed and approximately two million gallons of oil will be recovered for sale to oil reprocessors. Plans are underway to expand the capacity of this recovery center to handle oily wastes from additional GM facilities. GM is also investigating reprocessing its own oil for reuse in its facilities. In addition to seeking to reuse, reclaim and recycle its waste oil, GM has implemented programs actively seeking ways to reduce the quantity of petroleum products used at its facilities.

GM is also striving to reduce the volume of packaging materials being landfilled. In September, 1991, the eight midsize passenger car assembly plants set a goal to minimize landfill disposal of their packaging waste. To date, they have reduced their landfilled packaging volumes from an average of 90 pounds per vehicle to 23 pounds per vehicle by working with suppliers to reduce packaging and make packaging materials more recyclable. The packaging standards used by the midsize plants have become the basis of the "Solid Waste Management Packaging Material Guideline" published by the Automotive Industry Action Group (AIAG). (The AIAG is an independent organization of corporations seeking to improve productivity in the automotive industry, which develops and advocates implementation of industry standards, standard business practices and guidelines for manufacturers and suppliers.) The benefits of these efforts have cascaded into our other manufacturing operations as well, as suppliers reduce and change their packaging materials to meet the

standards.

In February, 1993, General Motors signed up to participate in a voluntary program, the Coalition of Northeastern Governors (CONEG) "Challenge" to reduce the volume of packaging materials being landfilled. We realize that packaging waste

makes up a large percentage of the U.S.'s solid waste and we are taking action, such as the activities described previously, to reduce our share of the burden. Not only are we targeting the packaging waste generated in our automotive manufacturing operations, but our Service Parts Operations are also working to reduce packaging volumes and increase the recycled content of packaging for after-market parts. In taking the CONEG Challenge, we pledged to meet or exceed the CONEG goal of a 15 percent reduction by 1996, in comparison to a 1988 base year. We plan to achieve this reduction in packaging waste on a corporate-wide basis, across the U.S., not only in the northeastern states.

GM ADDRESSES WASTE DISPOSAL

Despite our significant efforts to reduce waste, it is clear that GM, because of the nature of its products and the scope of its activities, will always be a generator of solid waste. Several years ago, GM management arrived at the conclusion that the best way to discharge our various responsibilities to our shareholders, our customers and society was to centralize our waste disposal activities in a manner that reduced the number of sites which contain our waste and then to insure that those few sites were managed and maintained in the very best possible manner.

Once this decision was made, GM established criteria for these central facilities including the following: the facility must be located in an area with suitable geology,

must be state of the art, and must be managed to the highest standards.

Investigations by GM revealed that the USPCI Echo Mountain, North Dakota site

meets all of GM's criteria.

 The Echo Mountain facility is designed to offer a high degree of environmental protection that far exceeds any state or federal standards for non-hazardous industrial waste landfills.

· Each "cell" in which waste is placed is designed and constructed with three liners: one five-foot thick liner of compacted clay and two synthetic liners with a leak detection system between them. Waste is placed on top of these liners. When full, a cap will be put on the cell that includes over eight feet of permanent protective covering, including both compacted clay, a synthetic layer, and an innovative 'biotic layer." The biotic layer virtually insures that no moisture would ever enter the closed cell over time.

· Each cell includes a liquid or "leachate" collection system designed to detect and collect rainfall or snow melt that may be in the cell. If present, the leachate will be continuously removed from the cell, tested and disposed of in a manner con-

sistent with the facility's permit.

 The facility's strict procedures for sampling and testing every load of incoming waste materials will ensure that the Echo Mountain facility will only accept nonhazardous waste that it is specifically authorized to manage under its operating per-

The facility has a full-time state inspector present during operations, who is an

employee of the North Dakota Department of Health.

 Because of the site's hydrogeology, the North Dakota Department of Health has concluded that no public water supplies within the region could be adversely impacted by waste disposal activities at the Echo Mountain Facility.

In addition, USPCI, a subsidiary of Union Pacific Corporation, is a well-established, nationwide waste management contractor committed to meeting the highest

environmental standards.

These elements lead GM to conclude that the Echo Mountain site is the most environmentally sound facility in the U.S. for its non-hazardous industrial waste. The Echo Mountain facility will effectively isolate GM's waste from the environment,

protect human health, and minimize long-term liability.

GM operates manufacturing facilities across the U.S. that require interstate shipping of waste to the Echo Mountain site, as well as to other waste management facilities. Because of our commitment to responsible waste disposal, General Motors has an interest in waste regulations in North Dakota and in federal legislation regarding the interstate transportation of waste. Any restrictions on interstate movement of industrial waste would inhibit our ability to manage waste in a cost-effective and environmentally sound manner.

More detailed information regarding GM's position on interstate movement of hazardous and non-hazardous industrial waste may be found in the attached documents: Motor Vehicle Manufacturers Association of the United States, Inc. (MVMA) [now reorganized under the name American Automobile Manufacturers Association (AAMA)] Position and Background on Interstate Movement of Hazardous and Non-

Hazardous Industrial Waste (June 22, 1992).

MOTOR VECHICLE MANUFACTURERS ASSOCATION OF THE UNITED STATES, INC. (MVMA) POSITION ON INTERSTATE MOVEMENT OF HAZARDOUS AND NON-HAZARDOUS INDUS-TRIAL WASTE-(JUNE 22, 1992)

 MVMA strongly opposes any restrictions on the interstate movement of hazardous and non-hazardous industrial waste. Any restrictions on the interstate move-ment of such waste would disrupt the national market for waste treatment and disposal services that is essential for the cost-effective and environmentally sound management of the nation's waste.

 Currently, almost every state is both an importer and an exporter of hazardous waste. All 50 states export some hazardous waste to out-of-state treatment and dis-

posal facilities; 48 states import wastes for treatment or disposal.

• The Resource Conservation and Recovery Act (RCRA) disposal regulations, including the land disposal restrictions, require the use of a wide variety of treatment technologies. it would be economically unreasonable to require each state to incur the substantial capital and operating costs of building every type of waste treatment facility irrespective of limited demand.

• In an effort to dispose of waste in an environmentally sound manner and to avoid cleanup liability, industry now screens waste treatment and disposal facilities very thoroughly. This results in significant non-price competition among waste management facilities. Restrictions on interstate movement of wastes would interfere with this competition and with the ability of waste generators to select the most environmentally protective waste management facility.

· Restrictions on the interstate movement of hazardous and non-hazardous industrial wastes would interfere with the development of markets for the reuse of industrial waste and for recyclable hazardous wastes, and would impede the development of alternative and innovative waste management and recycling technologies.

BACKGROUND

Issue

Several states have attempted to restrict interstate waste movement through waste import bans, differential fees, and other devices. The federal courts have ruled that state action to restrict the movement of waste across state lines violates the commerce clause of the U.S. Constitution. There currently is significant interstate movement of municipal solid waste, hazardous waste, and non-hazardous industrial waste.

House and Senate Status

Currently, neither H.R. 3865 nor S. 976 contains provisions restricting the interstate transportation of hazardous waste. Some non-hazardous industrial wastes may be subject to interstate transportation restrictions under both bills' provisions on interstate transportation of municipal waste. Attempts may be made during the committee mark-up in the House or on the floor of the House or Senate to add restrictions on the movement of hazardous and/or non-hazardous industrial waste.

MVMA Position

MVMA strongly opposes any restrictions on the interstate transportation of hazardous and non-hazardous industrial waste. Any such restrictions would disrupt the national market for waste treatment and disposal services that is essential for costeffective environmentally sound management of the nation's waste.

Discussion

Interstate Movement of Hazardous and Non-Hazardous Industrial Waste Is Necessary Because of the Wide Range of Required Waste Treatment and Disposal Technologies

As Congress considers interstate waste movement issues, it is critical to recognize that hazardous and non-hazardous industrial waste cannot be managed on a state or regional basis. Rather, hazardous and non-hazardous industrial waste present unique concerns that require a national market for 'waste treatment and disposal

The vast majority of states rely on other states to provide treatment and/or disposal services for specific Resource Conservation and Recovery Act (RCRA) hazardous wastes, as well as non-hazardous industrial wastes. To authorize states to ban or impose differential fees on the import of hazardous or industrial waste would throw our country's waste management system into chaos and would disrupt what overall is a functional system of interdependence among the states.

According to a survey conducted by the National Solid Wastes Management Association (NSWMA), no state or area of the country is completely self-sufficient in managing all of its hazardous waste. All 50 states export some hazardous waste to out-of-state treatment and disposal facilities, and 35 states are net exporters of hazardous waste. The average state exports hazardous waste to 19 other states, utiliz-

ing 12 different treatment and disposal technologies.

In addition, 48 states (all except Alaska and Montana) receive some out-of-state hazardous waste for treatment or disposal. Thus, almost every state is both an importer and an exporter of hazardous waste. This illustrates the significant inter-

dependence of the states in the management of hazardous waste.

There are many reasons why no single state is able to treat or dispose of all of its own hazardous or industrial waste. There may be geographical or geological constraints, a lack of capital or expertise to support sophisticated waste treatment technologies, or a lack of sufficient volume of a specific waste to support a particular

specialized treatment technology.

A critical factor driving the interdependence of states in the management of hazardous waste is the increasing stringency of federal requirements under RCRA. Improved management of hazardous waste has resulted in greater interstate dependence because the various treatment technologies that now are required are located in disparate parts of the country. Restrictions on the interstate movement of hazardous waste could result in sophisticated and effective management of these wastes.

For example, the RCRA land disposal restrictions impose a variety of treatment requirements that must be met before wastes can be disposed in landfills or other types of land disposal facilities. These treatment requirements include either numerical standards or designated technologies to be used to detoxify or immobilize hazardous constituents. In some cases, these requirements necessitate that a waste undergo a series of specialized treatment steps involving several different hazardous waste treatment and disposal facilities.

The foregoing is borne out by the NSWMA survey. For example, according to the NSWMA data, in 1987 Ohio had to export for treatment in other states virtually all of its hazardous waste requiring "metals recovery," and Indiana had to export all of its hazardous waste requiring "sludge treatment." This occurred notwithstanding that both states were major net importers of hazardous waste.

Capital and Operating Costs of Waste Treatment and Disposal Facilities Are Substantial

Not only do most states lack the necessary technologies to manage all of their hazardous and non-hazardous industrial waste, but the cost of duplicating each necessary technology within each state would be prohibitive. Duplicating the various required treatment technologies in each state would not be a prudent use of limited resources. Moreover, it would be many years before such facilities become available,

leading to disruptions in the interim.

A well-designed and operated hazardous waste disposal facility requires a significant capital investment and sophisticated management and technological expertise. For example, a minimum investment of \$65 million to \$100 million is necessary to open a 100-acre landfill, which is perhaps the most basic disposal "technology" by today's standards. Few individual states produce sufficient amounts of any particular type of hazardous waste to support a commercially feasible facility with the full

spectrum of required hazardous waste treatment technologies.

In addition, there are regions of the country that generate insufficient amounts of hazardous waste to support certain technologies. According to the NSWMA report, New England, the Pacific Northwest, and the Rocky Mountain areas of the country generate much smaller quantities of hazardous waste than other parts of the country. Because most treatment and disposal operations become more cost-effective as they increase in size, self-sufficiency in some parts of the country would require that hazardous waste generators pay unacceptably high costs. This in turn would discourage the environmentally beneficial practice of industrial waste generators, regardless of whether their waste is "hazardous" under RCRA, to arrange for treatment of their wastes prior to disposal.

Moreover, the imposition of restrictions on the interstate movement of hazardous and non-hazardous industrial 'waste could actually decrease the amount of hazardous and nonhazardous industrial waste treatment and disposal capacity available nationally. Waste disposal firms may be reluctant to invest the significant fluids necessary to construct new facilities, unless subsidized by tax dollars, if there is a

risk that the facility may be precluded from receiving out-of-state waste.

Finally, the demand for hazardous and non-hazardous industrial waste treatment and disposal technologies is geographically unstable, and will vary depending on factors such as the initiation of new Superfund remedial actions, the opening of new industrial facilities, the development of new production technologies, and the closure of existing treatment and disposal facilities. Recently, significant dislocations resulted when a number of major land disposal facilities in Indiana and Ohio closed. These dislocations would have been significantly more problematic if interstate hazardous waste restrictions had been in place.

The Role of Site Selection in Ensuring Sound Environmental Decision-Making In order to ensure that wastes are managed in the most environmentally sound manner possible, generators of hazardous and non-hazardous industrial waste must be allowed to select the facilities at which their wastes are treated and disposed, regardless of location. The imposition of restrictions on the ability of generators to select disposal facilities would compromise the generators' ability to manage their

wastes properly and to avoid potential future Superfund liability.

The choice of a waste disposal facility by a waste generator is driven by both monetary and non-monetary considerations. The primary non-monetary consideration is to assure that the facility meets applicable waste treatment and disposal standards and is otherwise unlikely to become a Superfund site. At present, a waste generator that desires to dispose of waste deemed "hazardous" typically engages in an extensive evaluation of potential treatment and disposal facilities, including environmental audits of such facilities. This self-policing mechanism leads to non-price competition among hazardous waste management facilities.

These non-price considerations come into play even with resect to wastes that are not defined as "hazardous" under RCRA but that contain hazardous constituents. Industrial waste generators send their wastes to sophisticated, well-run disposal sites located in geographically diverse areas not because they are required to do so by law, but because they wish to assure protection of human health and the environment and avoid potential future liability for cleanup costs to the maximum ex-

tent possible.

Legislation promoting or requiring state or regional hazardous or industrial waste management would reduce competition, including non-price competition, and remove a major incentive for treatment and disposal facilities to ensure proper environmental management. If generators are not given the option of selecting treatment and disposal facilities in another part of the country, but rather must use particular facilities solely because they are located within state or regional boundaries, treatment and disposal facilities will have little risk of losing customers because of poor

compliance records or less than exemplary housekeeping practices.

Customers of waste management facilities have a superior vantage point in monitoring the environmental practices of such facilities, and have far greater resources to do so than the regulatory authorities could ever acquire. Spot inspections by regulatory authorities cannot substitute for vigilance by facility customers who, with the added incentive of avoiding Superfund liability, can identify marginal operating practices and insist that they be corrected. This self-policing mechanism evaporates in a system where waste generators have no choice but to send their waste to instate or regional management facilities.

Restrictions on Interstate Movement of Hazardous and Non-Hazardous Industrial Waste Would Interfere With the Development of Markets for Such Waste

Restrictions on the interstate movement of industrial waste would interfere with the development of markets for the beneficial use of such waste. For example, the agricultural use of certain industrial sludges could be significantly imed since the market for such use is likely to depend on the ability to transport such sludges to agricultural areas. Likewise, restrictions on interstate movement of recyclable hazardous wastes would interfere with the development of alternative and innovative recycling and reclamation markets and technologies.

PREPARED STATEMENT OF DENNIS REDDING, MAYOR, SAWYER, ND

Thank you for the opportunity to speak. In April of this year, I started my 14th year as Mayor of Sawyer. After 8 years in that position I felt it was time for someone else to take over the position so I did not run for reelection but was re-elected as a write-in. After 12 years I again felt it was time for a change and about 5 months before election time I started telling the city council I would be done at the end of my term. Once again I was reelected as a write-in even when I told people I thought 12 years was enough.

In my 13 plus years as mayor I have seen a few changes take place in our community. These things include the paving of some of the city streets, upgrading our sewer lagoon, pouring a cement slab for our tennis and basketball court in the park,

and the implementation of an Annual, July 4th Celebration.

When Mr. Shannonhouse, Brian Beeter, and I met for the first time to talk over MSC's proposal for their facility I was fairly impressed. Here was a company that was going to come to our community to manage waste like we had never seen it handled before. After some checking with other states, we in the city found that MSC's original design for their facility was more then what other states required. All of MSC's plans were spelled out at open public meetings that hosted good turn-outs with many good questions asked of MSC and their staff. After going over the questions of the local people and working with the North Dakota State Health Department, MSC took a good design for their facility and made it even better.

Originally, Mr. Shannonhouse stated that MSC would be hiring from 6 to 10 local people to operate their facility. That number has grown to more than 25 full-time, year-round positions with, at present, about 10 full-time, temporary positions, giving a boost to a community that has a lot of people that work in the construction industry, which in N.D. isn't year round.

MSC has always been open and above board in all their dealings with Sawyer and

it's people. Any and all questions that we have asked, they have answered.

MSC has set high standards for their facility here at Sawyer, but they are standards that can be achieved by any company that is sincere in doing a good and lasting business in this and any other state. If all companies were required to achieve the standards set by MSC we would not really have any need to be here today.

The solid waste industry is growing every day and is never going to go away. We must work together as a United States to manage all the solid waste that is produced. To even think that every state should take care of its own waste is ridiculous. Are we as North Dakotans then supposed to provide our own forms of transportation, clothing and every other item that is imported into our state? If so, then we are going to go backward in time because the only forms of transportation that are produced in North Dakota are livestock and the feet we walk on. We need to work together with companies such as MSC to manage our waste as efficiently and as safely as possible, preserving lifestyles that are very important to all of us. In closing I would like to offer a personal invitation to you, Senator Dorgan, to

revisit our facility to see the vast changes that have been made since you were there about 3 years ago; and to you Mayor Riebe, a chance to see what a no-nonsense, quality, first-class company will do for a community. I can personally show you around our fine facility. If time permits we may even get to see a Canadian goose sitting on her nest, one of a couple flocks of wild turkeys or the herd of whitetails which have taken refuge in MSC's "No Hunting Allowed" acreage. When I say "our" facility, I mean that very personally, because I am very proud to be an employee of MSC. I have never worked for a company that is so seriously concerned about the welfare of its employees and the surrounding community.

Again, I strongly urge you and any other interested parties to accept my invitation and come to Sawyer to tour our fine facility. I do not believe that you will find

another as fine as this in the entire nation.

PREPARED STATEMENT OF CHEMICAL MANUFACTURERS ASSOCIATION

The Chemical Manufacturers Association (CMA) appreciates this opportunity to submit testimony on interstate transportation and disposition of waste. CMA is a nonprofit trade association whose member companies represent more than 90 percent of the productive capacity for basic industrial chemicals in the United States. During production of these chemicals, CMA member companies generate a variety of industrial wastes, both hazardous and non-hazardous. These wastes are regulated and managed under the Resource Conservation and Recovery Act (RCRA) as well as other federal and state statutes. While industrial activity will always generate come waste, CMA companies have been and continue to be, committed to reducing the amount of waste generated.

We understand and appreciate the concerns of certain states that feel they are bearing the burden for other states' unreasonable restrictions on, or failure to site waste management facilities. Industry shares in this frustration. However, the movement of interstate waste will continue to be necessary in order for industrial facilities to treat and dispose of their wastes in the most environmentally protective

manner.

There are sound environmental and economies-of-scale reasons why industrial facilities send their waste across state borders. For example, many chemical companies transport wastes outside the state of origin in order for wastes to reach facilities that will provide the most environmentally protective manner of treatment and

disposal. CMA member companies also ship secondary materials, which may be classified as waste, across state boundaries for recycling, recovery, and reclamation. Many of these facilities could not operate if they were limited to accepting only wastes generated in their home state. This is because these facilities must receive sufficient quantities of waste on a continuous basis in order to operate in a cost-effective manner. Also, many chemical companies ship wastes to out-of-state company owned or operated facilities where they are treated or disposed as part of a company's integrated waste management program.

CMA opposes restrictions to the interstate movement of waste. Banning, or significantly encumbering, the movement of certain types of wastes will impede protection of public health and the environment by delaying hazardous waste cleanups. hindering recycling efforts, preventing the use of the most effective treatment and disposal methods, and discouraging companies from implementing integrated waste

management programs.

We recognize that there are three distinct types of waste that move in interstate commerce: municipal waste, non-hazardous industrial waste and hazardous waste.

It is important to dist4nguish between industrial waste and municipal waste

Although the public may not always perceive the differences, and in fact is often misled or misinformed about waste properties and management practices, municipal solid waste and industrial waste have different characteristics and therefore are managed differently. To account for these important differences, responsible public policy needs to be based on scientific data. Municipal solid waste (MSW), such as that derived from households and commercial establishments, is a waste mixture composed primarily of paper, glass, yard wastes, plastics, and food wastes. Most MSW is disposed of in landfills. On the other hand, industrial solid waste (ISW), is generally composed of high volume solids, sludges, and wastewaters. The waste characteristics vary by industry. Some wastes are relatively inert (such as non-contact cooling waters); others are residues that may pose more significant risks. These wastes are managed by a variety of recycling, treatment, and disposal practices, many of which are very specialized and costly.

No state is completely self-sufficient in waste treatment and disposal NOR SHOULD THEY BE

Every state exports some waste. A state may be a net exporter of hazardous waste and a net importer of municipal waste. According to a December 31, 1990 study prepared for the National Solid Waste Management Association (NSWMA) all 50 states export some of the hazardous waste generated within their borders (Interchange of Hazardous Waste Management Services Among States, National Solid Wastes Management Association, December 1990). In fact, the average state exports hazardous waste to 19 other states and receives wastes from 19 other states for waste management services. This necessary exportation/importation of wastes is caused by the need for different wastes to be managed by differing waste-specific techniques.

It is unreasonable to require every state to treat and/or dispose of each industrial waste stream that is generated in-state. Special treatment technologies for every type of waste do not exist in every state. It is not economically feasible or necessary to require each state to have every specialized form of waste treatment. For example, the Toxic Substance Control Act (TSCA) requires polychlorinated biphenyls (PCBs) to be burned in an incinerator that can demonstrate a 99.9999 percent destruction removal efficiency (DRE). The incinerators are permitted under TSCA. Some are permitted to burn solids, and some only liquids. Not every state with PCB waste produces sufficient volumes of PCB waste to justify even one type of PCB incinerator. Moreover, restrictions on the movement of industrial waste would greatly increase the number of facilities which would have to be sited nationally. Considering the current resistance of local populations to the siting of such facilities in their neighborhoods, it would he extremely difficult to convince local populations that such facilities are necessary.

Responsible treatment and disposal of industrial waste depends on free movement across state lines

Different industrial wastes require different management techniques. The NSWMA survey shows that the average state exports wastes destined for 12 different kinds of treatment disposal technologies. The closest facility that offers the most appropriate management option may be located in another state. This is especially true for industrial facilities that are located near state borders or that require specialized treatment technologies which may not be located in every state.

Some disposal techniques are best suited to, or limited to, areas with specific geologic or hydrogeologic characteristics. These characteristics may provide the safest disposal method but are not found in every state. For example, areas sitting atop

layers of impervious clay are ideal for siting landfills, while areas where the water table is at or near the surface may be inappropriate.

No restrictions should be placed on the interstate movement of materials destined for recycling, reclamation, or recovery

All materials destined for recycling, reclamation, or recovery should continue to be allowed to move freely in interstate commerce. These emerging technologies offer great promise for reducing the overall waste disposal problem in the United States but are dependent on market forces. Economies of scale are often vital to the success of such ventures. As an example, the increasing effort by many companies to recycle plastics from the municipal waste stream could be severely impaired if access to post consumer plastics from a number of states is restricted. A CMA member company reports that more than 50 percent of its interstate waste shipments are materials destined for recycling, reclamation, or recovery. Another CMA company is constructing a multi-plastic recycling facility in New Jersey that will draw its supply from a 250-to-500 mile radius. Access to waste sources in a large geographic area may be the key to the success of a technology that provides the greatest protection for public health and the environment as well as reducing the demand on municipal landfill capacity.

Clearly, restricting the interstate movement of wastes will have an adverse impact on the environment by discouraging the amount of materials available for recycling, recovery, and reclamation. Such a result directly contradicts the "conserva-tion" and "recovery" goals of RCRA.

There are compelling reasons not to restrict interstate transportation of industrial wastes

The following are but a few examples:

1. Land Ban Restrictions—In developing the RCRA Land Disposal Restrictions (LDR), EPA based its compliance requirements on nationwide capacity for treatment and disposal of hazardous wastes. Any restrictions on interstate movement of hazardous waste will severely disrupt the LDR program. Generators may be unable to treat and dispose their wastes if they cannot gain access to facilities, identified by EPA, which are located in another state. Without such access, they would be forced to shut down.

2. Transportation of industrial non-hazardous waste to a hazardous waste treatment or disposal facility to be managed as hazardous waste-Some companies choose to manage some non-hazardous wastes in hazardous waste facilities because these facilities are currently more protective of human health and the environment than non-hazardous facilities. Because the definition of acceptable management practices continues to evolve, companies often choose the most conservative approach available. Given the limited number of hazardous waste facilities, restrictions on interstate transport would result in management practices that are legally acceptable but less protective of human health and the environment.

3. Intra-company transfers—Intra-company shipments of industrial waste allow a company to consolidate waste management operations and to manage its waste from its generation through treatment and/or disposal. Because the generator typically knows a waste's properties better than anyone else, that company is in the best position to evaluate the most appropriate treatment or disposal techniques for that

waste.

A consolidated waste management program also allows a company to maintain control of its wastes so as to minimize potential liabilities. in addition, an integrated waste management system allows a company to achieve economics of scale by combining similar or compatible waste from several company sources for treatment or deposit at the most appropriate location. Such internalized waste management pro-

grams greatly reduce the demand for limited commercial capacity.

4. Transportation of waste from environmental cleanups-Industry, and government as well. move wastes across state lines as part of environmental cleanups such as Superfund response actions, RCRA corrective actions, and voluntary cleanups. in addition, many governmental entities (DOD, DOE, utilities and publicly-owned wastewater treatment plants) generate solid waste and conduct remediations. These cleanups generate hazardous and non-hazardous wastes that must be managed in suitable management facilities that are not located in every state. In all likelihood, the volume of such remediation wastes will continue to increase for the foreseeable future. Restrictions on interstate movement of these wastes could significantly delay cleanups.

Waste minimization will reduce, but not eliminate, industrial waste

The chemical industry is actively working to reduce waste generation through voluntary waste minimization programs. Although waste minimization efforts will reduce the amount of wastes generated, industry will continue to generate wastes that require proper management. In fact, some of the most promising techniques for minimizing waste still result in generation of waste residues that require treatment or disposal. That management may require transporting wastes across state lines.

Bans and Differential Fees Will Not Solve the Treatment and Disposal Capacity Problem

Allowing states to ban imports of wastes, or to charge differential fees for disposing waste from another state, addresses the symptoms of treatment and disposal capacity shortfalls, but ignores the underlying problem: the failure of some states to

site critically needed waste treatment and disposal facilities.

Sanction schemes such as differential fees will not encourage exporting states to site industrial waste treatment or disposal facilities because the fees will be borne by the waste generator rather than the siting body—the states. many states have been unwilling to site facilities due to pressure from citizens. Citizens that are reluctant to allow waste management facilities in their own state are seldom forced

to pay directly for that choice.

The Capacity Assurance Plant (CAP) process was intended to ensure hazardous waste capacity in each state by encouraging states to site hazardous waste facilities where needed or make other provisions to manage the hazardous waste generated within their state. However, without meaningful sanctions, the CAP process has been generally ineffective. Although states that fail to comply with the capacity assurance provisions are threatened with loss of federal Superfund money, the Environmental Protection Agency has been reluctant to withhold Super fund money from non-complying states because such sanctions would discourage needed cleanup projects.

If Congress is looking for an effective way to apply sanctions directly to states, an approach similar to the one taken in the Clean Air Act Amendments of 1990 may be appropriate. Those amendments impose sanctions on any state that fails to adequately plan for attainment of air quality standards through the imposition of con-

struction bans and restrictions on highway funds.

Conclusion

The chemical industry is committed and acting to reduce wastes. However, waste minimization does not mean the elimination of all wastes. Industrial wastes, both hazardous and non-hazardous, must continue to be allowed to move freely in interstate commerce in order to facilitate appropriate recycling, treatment and disposal. It is critical that industrial wastes continue to be treated and disposed of at those facilities that provide the most appropriate and protective management, regardless of where those facilities are located. Congress should encourage state planning for the most efficient waste management systems that are protective of public health and the environment. In addition, all material transported for recycling, recovery, or reclamation must remain unrestricted.

LETTER FROM DARLENE RAU, MAX, ND

Greetings Senators and friends! Welcome to North Dakota, the breadbasket of the

world. By the grace of God may it remain so!

My testimony is not for everyone. I'm only concerned about people who eat food. I'm especially concerned for those who use food to nourish and sustain their bodies. The people who are not allowing the all mighty dollar to decide the future of our land, but, are truly trying to keep a safe and healthy food supply for the world. You members of the Commerce Committee will play a most important role in the outcome.

What is commerce? According to Webster, it is an exchange of merchandise. Therefore in order to have commerce or trade, you need an item of commerce. Yes, our grain is commerce. We sell it, supposedly for money (not enough, but it still qualifies as trade). That is true commerce; an exchange of merchandise for money. But, where or where were the people who keep our rules and watch out for us when they allowed the garbage industry to make trash an item of trade just like our grain? What is the item of commerce? Certainly you don't believe that we people of North Dakota are so desperate or stupid that we are buying trash? What is happening? We are losing our clean air, clean land and our clean water so that some out of state companies can get rich quick with only a few promises and a handful of desperate people looking for a job. Money does talk. Unfortunately some people have a low price and look only for today.

You members of the Commerce Committee have the power to keep North Dakota and other such states free from this pollution which will effect every person from coast to coast.

Roosevelt said, "A nation that destroys its soils destroys itself!" We must not allow the rivers of the land flowing with milk and honey to become plugged with

debris!

Man today thinks that he is powerful and can control everything. This is just not true. Man is actually quite helpless when it comes to the forces of nature. In the northern states like ours the climate makes it impossible to build roads that can remain intact with freeze and thaw conditions. How powerful and full of knowledge do some people think they are that they think these conditions will not be a factor in a dump operation here. State-of-the-art is a bad joke. The site at Sawyer was state-of the-art and yet changed many many times. How do we know what will be safe next year?

There is much at risk here today. Each person must be held responsible for what they do. By allowing other states to use us as their dumping grounds we are only adding to our problems as well as theirs. People must face their waste by keeping it and then and only then will they decide to be responsible and make less and be

wiser.

Garbage is not commerce nor is it economic development. It is the end and a per-

manent end that can't be cleaned-up as we are going about it today!

Don't dump on us! Give us the right to say NO to the ruin of our homes and life! Stop importation of waste. Let us choose.

DARLENE RAU.

PREPARED STATEMENT OF GORDON L. BELL, PH.D., ENGINEERING GEOLOGIST, BELL GEOPHYSICS

Each organism on this earth generates waste. According to some, each person generates a ton of waste each year. People in factories generate industrial waste. Waste ranges from sewage to garbage to industrial waste to hazardous and toxic waste including atomic waste. Waste comes as solids, liquids and gases. Some waste generates solid, liquid and gas. Some waste contains potentially harmful heavy metals. There are eight or more substances that chelate and remove heavy metals and some organic substances from waste material. I have recommended these to Washington state.

Waste is a world problem and a special national problem for the United States of America. I have expressed this before and will repeat some of the information

My observations and experiences are the basis for my interest in the subject of waste. This ranges from garbage piles next to coal piles or mist (meest) piles in the backyard near the outhouse - all not far from the hand pump water well. Some wells were in the house but only a short distance "out of sight, out of mind" under-ground to the seepage plume of waste. Other observations include barges of waste from San Francisco on their way about twenty miles to dump sites around the Farallon Islands. Similarly, there was the barge of garbage that traveled the Atlantic coast trying to find a place to unload. Recently, a train load of garbage and other waste traveled from New York to Illinois, Indiana and back to New Jersey for disposal. More recently, I had some geophysical training at the south end of San Francisco Bay where there is a pile of garbage about 100 feet high. These are a national embarrassment.

The contiguous 48 states should remain united in any national problem, especially in defense against the common problem of our own waste. Waste needs national and unified attention, not a fractured body with state against state. We have seen the problems of county against county and communities and the contests they have

given to the state

This indicates that the Interstate Commerce Law should remain unchanged and continue to permit free trade and healthy mobility between states. Divided we fail.

This should not be treated with secular world views of instant gratification.

We need a national policy concerning waste with guidelines that are acceptable and understood by all of us. The guidelines must be simple and effective. We can have a waste disposal system that efficiently and effectively reduces waste and transfers it to well-planned sites without hurting the human ecology or changing the environment of any life form.

Congress is busily considering all types of waste including waste water, drilling mud, mine waste and municipal lagoons (cesspools). Congress is also considering privatizing federal lands. Some of these lands continue across state lines and they continue to be an integral part of these United States.

May I suggest that Congress could establish a special commission including scientists of several specialties, biologists, botanists, chemists, geologists, geophysicists, and engineers to assess the conditions of each state and federal land concerning the needs and conditions and possible sites for waste disposal in a national system. It is a gigantic task to start, but I believe the answers are straightforward and self-evident once we get over the panic stages, including "not in my backyard." At present, emotions and local politics are shaping controls and restrictions that may become harmful to our neighbors and nation.

My observations and experiences are the basis for this letter. These range from local experiences mentioned above to others that range from a study of demolition at Tooele Ordnance Depot, under Col. Rogan, US Army to highway construction where Interstate 94 crossed two town garbage dumps that were partly covered yet leaking into the ground water, and a good five-day course on the siting, construction and closure of land fills given by the EPA in Denver, Colorado. These and land fills of ash from coal-fired electrical generating plants helped inspire my US patent, "Unified Monitoring System for Hazardous and Toxic Waste." My thanks to Senator

Dorgan for his help in communication in obtaining the patent.

Later experiences include help in the search for possible waste from World War II on the Island of Guam, and one inquiry from South Africa. Also recommendations concerning wood chip waste in Washington state to the special and exceptionally good engineering practices of Municipal Services Corporation waste disposal south of Sawyer, North Dakota. I believe that this is one of the most efficiently designed and constructed waste disposal systems in the United States. This is a very good industry with good jobs for North Dakota people. All waste is monitored for approval before it is accepted from the generator. All waste that passes the tests is treated to remove the heavy metals then solidified and placed in the land fill. The land fill is regularly monitored by the State Health Department.

I believe there is a place #or properly placed incineration practices, with metals extracted from the ashes and the ashes (only about 20 percent of the original volume) solidified and placed in well-designed repositories in special locations (sites) with the primary goal the protection of the environment and human health established by a Congressional Commission of Scientists. The ashes should be completely isolated from the ground water and not dumped in old wells, mine shafts or In or

near surface ponds, etc.

My concern is that we solve the waste problems with national standards that the Congressional Search Commission recommends including reference to the sites for the generator of the waste and a stable waste industry with established disposal sites to receive each class and type of waste. North Dakota sends its toxic and hazardous waste to Oklahoma and Utah. It seems wise to continue developing a national system for the control of waste including good uninhibited (free) interstate commerce.

Prepared Statement of Gov. Ed Schafer, State of North Dakota

Senator Dorgan, and members of the Senate Committee on Commerce, Science,

and Transportation:

Governors and elected state officials in North Dakota are facing a tough balancing act today: on one hand we must ensure that the rich natural resources that draw people to live in North Dakota—things like clean air and pure water—are carefully guarded. On the other hand, we must address the fact that we generate solid waste in North Dakota, and must find ways to adequately dispose of this waste.

I feel very strongly that we have a fundamental responsibility to use our resources wisely, and to invest regularly in their upkeep so that future generations

enjoy the same clean air and pure water that we enjoy today.

The question is: Where do we draw the line between environmental protection and

satisfactory waste disposal?

People with strong feelings on this issue for years, even decades, have fought intense and emotional battles. And these battles have created deep divisions in our

society, in our state, and in our neighborhoods.

It is my belief that a clean, healthy, well-maintained and productive environ-mental base is central a strong economy. While it's true that throughout time there have been conflicts over the individual use of land, air and water. In the end, however, the fundamental interests of both environmentalists and industrialists have been served by a base that is managed effectively for sustained production.

Natural resources must be part of a fixed capital asset stock of any state. Like pieces of equipment, they produce goods and services-and jobs. And like pieces of equipment, they require regular investments in maintenance and upkeep to keep them from wearing out. Properly maintained, these assets can be productive over a long, long period of time.

The total amount of solid waste produced in America is increasing by three million tons per year, and some critics contend that the increase in waste products confirms that the United States is a throw-away society, that Americans waste too

much.

To an extent it is true that Americans have little incentive to reduce waste. One reason Americans waste too much is that few are held directly accountable for the

costs of disposal. The costs instead are borne by the community as a whole.

This produces another problem. In recent years, the country has suffered a decline in municipal landfill capacity. The reason for this decline is community reluctance

to approve new landfills. That appears to be the case in North Dakota.

Various national surveys have shown that a majority of those polled would be concerned if a landfill were located ten miles from their home, believing their property values would decline and their health would be endangered. These concerns then filter through to local government officials, who then feel pressured to restrict land use or otherwise prohibit landfills in their area.

On the flip side, many local officials want to reduce or restrict the transportation and disposal of solid waste, but are not allowed to implement such a policy because

of the Interstate Commerce Act prohibits this action.

In the last 20 years, Congress has enacted a wide array of laws designed to protect and improve the quality of our natural environment. Some have worked, others have been nothing short of unimaginative and burdensome.

Regarding the "Interstate Transportation of Municipal Waste Act of 1993," I sup-

port the idea of giving individual states the authority to decide whether to store solid waste shipped from other states or to restrict the shipment of solid waste.

North Dakotans deserve the right to be more involved in decisions of waste dis-

posal and the transportation of said disposal.

With the introduction of industrial waste into North Dakota, state leaders have been forced to conduct inventories of our in-state assets, and of our ability to handle the waste. While some may argue with the outcome, the debate has been healthy. With the introduction of industrial waste into North Dakota, state leaders have

been forced to conduct inventories of our in-state assets, or our ability to handle the

waste, and of the emotional ramifications of disposing waste in our backyard.

Our quality of life is one of the best benefits of living in North Dakota, and we must rationally balance developmental issues with environmental protection. To this end, federal environmental rules and regulations need to be more sensitive to problems of small towns and small businesses.

PREPARED STATEMENT OF CONRAD KRAHLING, DAKOTA RURAL ACTION

Mr. Chairman and members of the committee, my name is Conrad Krahling and I am submitting this testimony on behalf of Dakota Rural Action (DRA). DRA is a grassroots citizens' organization, dedicated to the preservation of the family farm and the lifestyle that accompanies rural living. We regret we could not be present at the field hearing in Bismarck, ND to present this in person, but appreciate the

opportunity to submit our written testimony on this important issue.

I serve as a pastor in the small town of Oldham, SD. I am a member of Dakota Rural Action's Groundwater Protection Committee and am submitting this testimony because of the ever growing threat of South Dakota being targeted as a host

for out of state waste dumps.

Our organization has been involved in the development of waste management policy on the local, state and national level. We are working to establish local recycling and reduction programs, have been active participants in the development of South Dakota's 15 year solid waste management plan and worked for the passage of recycling and reduction legislation. We have also worked on federal "Right to Say No to Out of State Waste" legislation over the last two sessions of Congress. We hope this is the year Congress grants states the right to say "NO"

Our overall goal is to see that South Dakota responsibly deals with its own waste by following the EPA's Solid Waste Management Hierarchy, which emphasizes reduction of waste at the source, recycling and reuse over landfilling and incineration. We expect nothing less from our neighbors, whether they be from Nebraska or New York. We believe that dumping on our neighbors is wrong, it is a form of exploitation as those with the least economic or political power are most often the victims.

Dakota Rural Action firmly believes that each state should have the unconditional right to say "no" to out of state waste. We believe that if states or municipalities know they do not have the right of sending their waste to another state at will; they will establish more efficient and responsible means of managing their wastes Instead of forcing states to accept others garbage, we believe it would be wise to force states to responsibly deal with their own waste. We believe that conditions should be placed on those states exporting their waste, rather than on importing states.

Allowing states to ship their garbage to other states without allowing a state to say "no", undermines reduction and recycling efforts. It provides an easy way to avoid addressing the real problem, excessive waste generation and lack of recycling and reuse policy. Waste exportation allows wasteful practices to continue at someone else's expense. We always hear that establishing mega-dumps in South Dakota should not be a problem because of the vast amounts of undeveloped land that we have in our state. We do not believe that our wide open spaces should be exploited by those who would refuse to deal with waste in a manner responsible to the envi-

ronment as well as to future generations. Our concern of becoming the dumping ground for other states is well founded. Our state has gone through referendums, initiatives, law-suits, and legislation over just one attempted mega-dump, which would have dumped millions of tons of out of state garbage within our borders. South Dakotans have repeatedly said "No" to this proposal; but the company refuses to take "No" for an answer. There have also been proposals for mega-dumps for the Pine Ridge and Rosebud Reservations in South Dakota. These proposals are widely opposed by Native Americans and non-Indians

of those areas. This is a very real and immediate concern.

We are constantly reminded that we can not say "no" to out of state waste because of the Interstate Commerce Clause of the United States Constitution. I have a hard time believing that the authors of that document could have possibly envisioned that garbage would some day be considered commerce. We believe that proponents of waste exportation have twisted the intent of this clause to fit their needs. We are not merely saying "No" to every proposal. We are willing to work with other states for a solution to the waste problem. Having the right to say "No" gives us the bargaining power that may be necessary to avoid unwanted and irresponsible

In conclusion, I urge you to support legislation that allows states to say "no" to out of state waste. If a state takes in garbage from other states, it should do so by mutual agreement, not coercion. I also urge you to require states to establish comprehensive solid waste management plans that emphasize reduction, reuse and re-

cycling instead of allowing them to dump their problems on others.

Thank you for the opportunity to submit testimony on this important issue.

Prepared Statement of James Asche, Supervisor, White Stone Hill Township, SARGENT COUNTY, ND

I welcome the opportunity to address this panel today. Upon reviewing the draft of S. 439, the "Interstate Transportation of Municipal Waste Act of 1993", I have

concluded that the following concerns need your attention:
In subsection (b)(1), EXCEPTIONS TO AUTHORITY TO PROHIBIT OUT OF STATE WASTE, it appears that if an individual landfill, already in operation and in compliance with State laws, received any municipal waste in 1991 it could be allowed an unlimited increase to its intake rate of out-of-state waste. Isn't this contrary to the intent of the bill?

Subsection (b)(2) refers to "proposed landfills". This needs definition. For instance a proposed landfill should include any landfill whose active disposal area is allowed

to increase via permit from state authority.

Subsection (d)(4)(c) refers to recyclable material. I recommend that any of the recyclable materials listed not be included in "municipal waste" for disposal in another state's landfill even if not separated for recycling or reclamation.

I recommend that the affected local government be authorized to levy a tax on out-of-state waste imported for disposal. This will provide regulation where the envi-

ronmental impact is the greatest.

The draft indicates no provision for enforcement. Clear responsibility for enforcement needs to be established and consequences for violations must exceed what

could be considered the cost of doing business.

This bill is definitely a step in the right direction. The United States needs this bill. North Dakota needs this bill. The more densely populated states should not be allowed to transfer their waste disposal problems by easy, fast, and cheap dumping in the soil of the less populated states, threatening the health and environment of

people who live far from where the waste was generated. The American lifestyle promotes consumption and disposal. The environment and quality of life is subjected to irreparable damage. The children will inherit the "waste lands" being created today. This bill can encourage more responsible solutions to waste disposal problems, e.g., increased recycling. Instead of simply paying a fee and shipping the problem out of state and out of mind, an incentive to look more creatively at waste disposal appears. According to the Ramsey County Division of Solid Waste, St. Paul, MN, the disposal fee at the Ramsey County facility is \$67/ton; and \$98/ton at the nearby Hennepin County incinerator. This compares to a proposed \$49/ton for the planned "trash train" which would ship waste from a St. Paul transfer station to a landfill in North Dakota by rail. Easy, fast, and cheap—problems not solved, just transported across the border. transported-across the border.

Municipal waste or incinerator ash destined for a landfill is not a commodity of commerce. NOBODY WANTS IT! It's not converted to energy except methane dur-

ing decomposition. It is not used as raw material for any saleable product. AGAIN, NOBODY WANTS IT! Instead, landfill operators are paid to bury it.

In behalf of the residents of White Stone Hill Township, I must say, for several years we have observed the daily movement of large garbage trucks through our community. They deposit their load on the growing mountain of waste and are gone. We are peace loving people who have learned to tolerate this traffic but have yet to accept it. It's difficult to imagine the assault on our dignity and our environment should the rate of incoming waste be allowed to grow unchecked. According to the 1992 North Dakota District 5 Solid Waste Management report, the Dakota Landfill near Gwinner is already receiving 80 percent of its current 250 ton/day volume from out of state. The Grand Forks Herald recently reported that the current owner plans to increase the intake rate to 2000 ton/day mostly from out of state. White Stone Hill Township needs this bill.

Thank you.

BOSTON PUBLIC LIBRARY

3 9999 05982 109 8



ISBN 0-16-041469-5

